

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

TRUEPOSITION, INC.,

**Plaintiff and
Counterclaim-Defendant,**

v.

ANDREW CORPORATION,

**Defendant and
Counterclaim Plaintiff.**

Civil Action No. 05-00747-SLR

**ANDREW CORPORATION'S OPENING BRIEF
IN SUPPORT OF ITS RENEWED MOTION FOR JUDGMENTS
AS A MATTER OF LAW, OR ALTERNATIVELY, A NEW TRIAL**

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I. NATURE AND STAGE OF PROCEEDINGS

TruePosition, Inc. (“TP”) filed this action against Andrew Corporation on October 25, 2005, alleging infringement of U.S. Patent No. 5,327,144. D.I. 1. Andrew filed counterclaims and affirmative defenses, including for non-infringement, fraud, promissory estoppel, equitable estoppel and implied license. D.I. 13; D.I. 38. A jury trial began September 4, 2007. At the close of TP’s case, Andrew moved for judgment as a matter of law on both infringement and damages, because TP did not prove essential elements of its claims. A784-786. The Court reserved judgment on Andrew’s motions, (A798), and Andrew renewed them at the close of evidence on September 13, 2007. A979.

On September 14, 2007, the jury returned a verdict for TP on literal infringement, willfulness, fraud and promissory estoppel, and awarded TP \$45.3 million in “lost profits” damages. D.I. 292. Andrew’s claims of equitable estoppel and implied license were not tried to the jury, because the Court ruled it would decide them following the jury trial. A237:11-A238:16. The parties are briefing Andrew’s equitable estoppel and implied license claims concurrently with Andrew’s JMOLs. D.I. 324. On October 1, 2007, TP moved for an injunction and for enhanced damages. D.I. 314; D.I. 316. Andrew’s responsive briefing is due November 15, 2007. D.I. 320.

II. SUMMARY OF ARGUMENT

1. TP was required to prove literal infringement. Based on the Court’s claim constructions and the undisputed evidence of record, no reasonable jury could have determined Andrew literally infringed any asserted claim of the ‘144 patent.

2. To prove willfulness, TP was required to prove both: (1) an objectively high likelihood that Andrew’s actions constituted infringement of a valid patent; and (2) that this objectively-defined risk (determined by the record developed in the infringement proceeding)

was either known or so obvious that it should have been known to Andrew. Based on the evidence of record, no reasonable jury could have determined Andrew willfully infringed the '144 patent under the *Seagate* standard.

3. No reasonable jury could find that TP is not promissory estopped from asserting the '144 patent against Andrew. TP made multiple promises, expected to induce Andrew's action and forbearance, Andrew reasonably relied and took action to its detriment, and TP's promises are binding because injustice can be avoided only by enforcement.

4. No reasonable jury could find that TP is not liable for fraud. TP misrepresented and omitted a material fact, did so with knowledge or reckless disregard for the truth and the intent to mislead, Andrew reasonably relied and was damaged as a result.

5. No reasonable jury could have awarded TP \$45.3 million in lost profits damages because: acceptable non-infringing alternatives are available, TP promised to license the '144 patent on RAND terms, TP cannot get damages on equipment not yet supplied to STC, and the damages award is speculative.

III. STATEMENT OF FACTS

A. The '144 Patent

The application leading to the '144 patent was filed May 7, 1993 and the '144 patent issued July 5, 1994. A104. The '144 patent claims a cell phone location system. A120 at 1:5-10; A129 at 20:3-24:68. The location technology disclosed in the '144 patent is UTDOA: Uplink Time Difference Of Arrival. A103-134; A248:6-10. TP did not invent UTDOA. A665. UTDOA was invented in the World War II time frame and has been used extensively over the 50 years prior to the filing of the '144 patent as a location technology in numerous applications, including for cellular telephone location. A665:15-18; A757:11-17.

Due to the extensive UTDOA prior art, the ‘144 patent claims are directed to a very specific UTDOA configuration. Each asserted claim in the patent requires that UTDOA be performed using “one of a prescribed set of reverse control channels.” A129 at 20:4-34; A131 at 23:56-24:2, 24:51-68; *see also* A418:16-A420:16; A660:8-11. The patent specification explains that a “reverse control channel” is a specific predetermined range of frequencies used to transmit information in only one direction – from a cell phone to a cellular network site (“cell site”). A120 at 2:15-20. In that regard, the specification explains the “one of a prescribed set of reverse control channels” in the only embodiment in the patent uses one of 21 predetermined ranges of frequencies (i.e. channels) to transmit:

In particular the twenty-one control channels for “A” systems are numbered 313 through 333 and occupy a 30 KHz band of frequencies 834.390 MHz to 834.990 MHz. The control channels for “B” systems are numbered 334 through 354 and occupy 835.020 MHz to 835.620 MHz. Each cell site (or, where a cell site is “sectored” as described below, each sector of that cell site) uses only a single control channel.

A120 at 2:8-15.

The patent dictates that at least three cell sites must receive the same radio signal from a cellular phone to perform the UTDOA calculation. A129 at 20:4-34; A131 at 23:56-24:2, 24:51-68. Each cell site converts the radio signal received to a baseband (i.e., low frequency) signal, digitizes the baseband signal and sends the digitized baseband signal, along with a time stamp, to a central site. The patent explains it has high speed lines connecting the cell sites to the central site. A127 at 15:59-64. At trial, named inventor John Webber testified the high speed lines are necessary because the claimed invention must transfer huge amounts of raw data from the cell sites to the central site due to the particular system architecture disclosed in the specification and embodied expressly in the claims. A484:6-22; A467:13-A469:15.

As shown in Figures 7 and 8 of the ‘144 patent, the central site uses a complicated series of specific calculations including cross-correlation, calculations of theoretical delays at grid points, and least-mean-squares to estimate the signals’ times of arrival at pairs of reporting cell sites, calculate the differences in arrival times and estimate the location of the cell phone by comparing measured time of arrival delays with a grid of reference delays stored at the central site. *See* A112-A118 (Figs. 7 and 8); *see also* A126 at 13:33-56, A127 at 16:5-59; A466:19-A467:6; A475:4-A479:7; A756:15-A763:24.

The ‘144 patent does not disclose or claim UTDOA techniques for use in systems with an architecture like GSM – the type of cellular system TP now alleges the ‘144 patent covers. *See* A856:6-15. Nor does the ‘144 patent disclose or claim the use of bi-directional hopping channels without a predetermined frequency such as the SDCCH that formed the backbone of TP’s infringement case. *See* A856:23-A857:8. Indeed, in response to prior art rejections during prosecution of the ‘144 patent, TP gave up bi-directional control channels (such as the SDCCH) and narrowed its claims to the “reverse control channels” that operate on predetermined frequencies and transmit control information in only one direction, from a cell phone to a cell site. *See* A33-A36, A37-A54 (amending claims and distinguishing over prior art).

B. The ETSI UTDOA Standardization.

TP began to lobby for UTDOA standardization about six years after the ‘144 patent issued. From the time it began the standardization process, TP always interpreted the ‘144 patent to cover the technology it was trying to standardize at ETSI.¹ A289:7-11; A335:21-24; A277:23-A278:1; A286:9-17; A269:18-21. However, TP never declared to ETSI its belief that the ‘144

¹ ETSI is the European Telecommunications Standards Institute, a standards body based in France. A257:10-12. ETSI oversees a number of telecommunications standards. A265:20-A266:3. 3GPP is a partner in ETSI (A749:23-25) and is responsible for overseeing GSM standards. A265:15-19.

patent was essential to practice the technology it was trying to standardize, and never declared the '144 patent as essential to the standard. A451:18-A452:3. Instead, TP kept silent about its beliefs regarding the '144 patent to make it appear as though the proposed UTDOA standard was a multi-vendor technology that would be available to everyone, as required by the ETSI IPR policy. In doing so, TP eliminated industry concern that the proposed UTDOA standard was a "proprietary technology" (A91-93; A2-3; A4-6) that was inappropriate for public standardization, thereby clearing the path for UTDOA to be adopted by ETSI. Only after embedding this technology into the standard and securing the investment of the industry in this technical approach rather than the numerous alternatives, did TP go public with its contention that the '144 patent blocked anyone but TP from practicing the full ETSI standard.

1. TP Could Not Get UTDOA Standardized Without Eradicating The Perception That It Was A Proprietary Technology.

TP began the UTDOA standardization process by submitting a "U-TDOA in GSM and GPRS Feasibility Study." A217-223. The Feasibility Study was intended to "turn the skeptical interest into broader support" for UTDOA and "address the concerns of the GERAN members" that UTDOA was not a "multi-vendor" system. A91-A92; A306:8-22. TP's internal documents introduced into evidence at trial illustrate TP's concern about the standards body and its members believing the UTDOA technology proposed by TP was proprietary:

- DTX 901 (A92) ("acceptance of U-TDOA into the GERAN specs depends on it being a 'Multi-vendor' system");
- DTX 224 (A52) ("it will help our cause in getting U-TDOA standardized if we report that we are collaborating with Grayson (Because then the major infrastructure vendors will believe that U-TDOA is NOT a proprietary solution");²

² Grayson Wireless was a predecessor to Andrew.

- DTX 44 (A2) and DTX 45 (A4-A5) (“You might consider adding a term to the Grayson license agreement that has Grayson joining the 3GPP and actively promoting/contributing to the standardization of U-TDOA....it will eliminate a perception/concern that U-TDOA is a proprietary technology....”).

To address the concern that the UTDOA standard being proposed was proprietary technology, TP promised in the Feasibility Study to license any of its relevant intellectual property on reasonable, non-discriminatory terms:

TruePosition, Incorporated may hold one or more patents or copyrights that cover information contained in this document. A license will be made available to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.

A223 at 3.3.5. This promise applied to all TP patents, including the ‘144 patent. *See id.*; A405:17-24. Later, to further demonstrate that “[m]ore than one person can make” the standardized technology (A303:9-16), TP turned to its only competitor in the two-vendor marketplace — Andrew. *See* A367:15-17.

The Feasibility Study was not the only place TP promised the technology proposed was available for all to use. TP also promised the Study Group – made up of competing wireless operators, cellular network infrastructure providers, TP, and Andrew – that the UTDOA standard would be for the benefit of all Study Group members. A327:14-A328:14; *see also* A373:13-21; A24; A81.

2. The Accused SDCCH Channel Was Part Of TP’s Standardization Plan From The Beginning.

Notably, SDCCH location – which was at the heart of TP’s infringement case at trial – was part of the proposed standard from the very beginning. Indeed, the Feasibility Study, in which TP promised to license all its patents relating to technology referenced in the Feasibility Study, expressly discusses using an SDCCH for location purposes:

As an alternative, the energy associated with call setup signaling activity on the SDCCH can be used to locate an idle MS.

A220; *see also* A404:13-20.

3. Andrew And TP Worked Closely Together To Standardize SDCCH UTDOA Location Technology Based On TP's Promises.

TP and Andrew worked closely together for approximately a year and half to get UTDOA standardized for GSM. *See* A332:1-A333:10; A453:21-A454:2; A409:21-A410:22; A884:14-A888:21. UTDOA in fact was standardized as a result of the proposals Andrew and TP jointly submitted. *See* A44 at 4.2.4; A9; A333:7-10. Like the Feasibility Study, the UTDOA standard “specifically called out this same SDCCH as one of the options for U-TDOA.” A405:25-A406:4; *see also* A226 at 4.2.4.

Andrew participated in the standardization process with TP because Andrew’s standards representative (Oskar Magnusson) understood that the Feasibility Study was “basically a stated promise” that a license would be made available to any patents that TP interpreted as covering UTDOA. A865:13-A867:19. But Mr. Magnusson did not just rely on the Feasibility Study; he also investigated whether there were any IP issues lurking in the standards, and was reassured there were none. *See* A866:24-A867:8 (investigated IP issues); A898:18-A902:1/A7; A903-A904/A101.

And Mr. Magnusson told all this to Andrew’s executives. *See* A867:23-A868:21. Andrew too believed it would benefit from the standards activity, and would not have joined its effort if it knew it could not produce or practice standardized technology. *See* A941:20-A942:7; A897:24-A898:17 (never thought Andrew would be blocked from practicing standard; belief based on, *inter alia*, feasibility study, joint venture documents, standards work); *see also* A940:8-13; A868:24-A869:25; A882:14-22; A891:6-16. Notably, no one at TP ever told “Andrew that TruePosition believed the ‘144 patent covered UTDOA in GSM using the SDCCH channel.” *See* A445:4-8.

4. TP Admitted It Believed The ‘144 Patent To Be Essential To A Standardized UTDOA Option, And That It Intentionally Did Not Disclose The Patent.

TP admitted at trial: “it is...TruePosition’s position, that the ‘144 is essential to that option in the standard.” A289:7-11; *see also* A1; A416:11-25. There is no exclusion in the ETSI patent policy regarding the declaration of patents essential to options in the specifications or options in the standard. *See* A215 (ETSI IPR Policy defining “STANDARD” as “any standard adopted by ETSI including options therein”) (emphasis added). It is uncontested that TP “did not declare [the ‘144 patent] as essential to the standard.” A451:18-A452:3.

TP was well aware of its disclosure obligations. TP President Joe Sheehan testified at trial he was “aware” of “the ETSI IPR or patent disclosure rules” when “TruePosition made an affirmative decision not to declare the ‘144 patent to ETSI after considering whether to do that.” A288:8-20. TP’s own standards manager urged TP’s executives to declare patents, including the ‘144 patent, as essential. *See* DTX 1065 (A94-96); DTX 1066 (A97-99); DTX 1069 (A100).

But TP’s executives, including the general counsel, ignored their standards manager and thought instead it would be a “good idea” if Andrew’s predecessor, Grayson Wireless, was contractually obligated to join ETSI to eliminate the “perception/concern” that the proposed standard technology was “proprietary” to TP. *See* DTX 44 (A2) and 45 (A4-5).

C. Andrew’s Accused Geometrix® Products.

Andrew’s standardized UTDOA product, which TP accuses of infringement, is called Geometrix. Andrew did a great deal of research and development, and independently developed Geometrix over many years, beginning in 1992. *See* A938:1-8. The initial cost of developing Geometrix was approximately \$25 million. A938:13-16. Although development began in 1992, the first Geometrix system was not deployed until 2001 and required continual updates to conform to new standards such as GSM, requiring even greater investment of time and resources

by Andrew in this product line. A938:17-A939:11. Indeed, Geometrix incorporates hundreds of standards because adherence to standards is absolutely critical for the product's success. A939:8-A940:1.

Unlike the configuration disclosed and claimed in the '144 patent, Andrew's Geometrix products have a de-centralized architecture. A769:22-A775:13. Geometrix performs a significant amount of its processing in components called wireless location sensors (WLSs). *See* A521:25-A524:1; A583:4-A584:22. Unlike the system disclosed and claimed in the '144 patent, Geometrix did not have access to high-speed lines from the cell sites at STC in Saudi Arabia, so Geometrix cannot send baseband signals from cell sites to a central site as required by claim 1. *See* A803:19-A805:17. Geometrix also had to be designed to operate in the fundamentally different GSM protocol, and accordingly Geometrix uses the novel bi-directional variable frequency SDCCH channel (which was invented for GSM, *see* A743:1-A744:8; A746:16-23). Geometrix will not locate a phone unless it is specifically requested to do so by an external source (A579:14-A580:8; A667:19-A670:5; A64-A65), or provide cell phone subscribers access to location data (A680:8-16) – all differences from the '144 patent.

D. The Saudi Telecom Contract.

After working together with TP for two years on the UTDOA standardization, and approximately one month after UTDOA was standardized for GSM, Andrew bid and, ultimately won, a deployment with Saudi Telecom (STC) in Saudi Arabia. *See* A946:18-A947:16. Andrew does not dispute it was aware of the '144 patent's existence when it bid on the STC deal, but due to TP's deception, Andrew had no notice of TP's belief that the '144 patent covered use of an SDCCH or TP's intent to exclude others from practicing the standardized technology. *See above* at 4-8. TP's communications to Andrew about the '144 patent were cursory and intended to keep Andrew and the ETSI community in the dark about TP's real intentions. *See* PTX 7 (A135-

137); 8 (A138-140); 17 (A158-162); 18 (A163-169); 15R (A141-157). Indeed, TP's general counsel admitted at trial that he was not aware of anyone from TP telling anyone from Andrew that TP believed the '144 patent covered the SDCCH in GSM, even at the time of the parties' January 2004 Settlement Agreement that specifically referenced the '144 patent. A445:4-8.

Delivering the STC Bid. The evidence introduced at trial establishes the bid to STC was submitted to STC in Riyadh by Andrew Middle East, which is located in Dubai, Saudi Arabia. *See* A182; A204. Terry Garner, Andrew's division President, provided un rebutted testimony that Andrew does not communicate directly with STC from the United States, and that instead Andrew sends communications to STC via "employees, our salespeople or our agents in the region" who effect "hand delivery to the customer." A946:5-8. *See also* A180-A198 (cover page to offer); A199 (stating tender brought to STC by Saudi agent Al-Misehal). Mr. Garner also provided un rebutted testimony that there has never been a meeting with STC in the United States. A946:9-12.

STC Contract Status. The STC rollout has five phases, each of which is separately bid. A946:18-A947:20. It is undisputed that Andrew has only been awarded three phases of the five-phase STC rollout. *Id.* Although Andrew's initial bid was for a kingdom-wide rollout of over 4000 cell sites, STC did not award Andrew the entirety of that business. Instead, STC awarded Andrew a limited rollout of only 600 cell sites for Phase 1. *See* A967:15-19. Phase 2 was only 383 sites. A967:20-24. Although STC has committed to Andrew for Phase 3, there has been no commitment for any particular type of equipment, any number of cell sites, or any other commitment for particular goods or services. A967:25-A968:9; *see also* A946:18-A947:11; A947:21-23. Any additional STC business is not guaranteed to Andrew or even quantifiable. A946:18-A947:11; A947:24-25. Indeed, TP continues to bid for the STC business. A341:21-

A342:20. This is possible because TP and Andrew equipment can work together; there are no interoperability issues that would preclude TP from winning future phases since both companies' equipment complies with the same ETSI standard. A948:6-20.

TP's Damages Claim On The STC Business. Although TP obtained a lost profits award at trial for the STC business, TP's president testified at trial that noninfringing alternatives to the '144 patent are available in the market. A299:14-A300:4; A363:12-16. The testimony of TP's other witnesses is in accord. A957:4-A958:19; A722:3-12.

IV. ARGUMENT

A. The Legal Standards.

1. Judgment As A Matter Of Law.

Judgment as a matter of law is appropriate when "a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue." Fed. R. Civ. P. 50(a)(1). The moving party prevails on a renewed motion for judgment as a matter of law following a jury trial if it shows "that the jury's findings, presumed or express, are not supported by substantial evidence or, if they were, that the legal conclusions implied [by] the jury's verdict cannot in law be supported by those findings." *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1348 (Fed. Cir. 1998) (quotations and internal citations omitted). "Substantial' evidence is such relevant evidence from the record taken as a whole as might be acceptable by a reasonable mind as adequate to support the finding under review." *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893 (Fed. Cir. 1984). With regard to factual findings, the court draws all reasonable inferences in favor of the nonmoving party and does not substitute its view of the conflicting evidence for that of the jury. *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1308 (Fed. Cir. 2002). In sum, the court determines whether the

evidence reasonably supports the jury's verdict. *See Dawn Equip. Co. v. Kentucky Farms Inc.*, 140 F.3d 1009, 1014 (Fed. Cir. 1998).

2. Motion For A New Trial.

The decision to grant or deny a new trial is within the sound discretion of the trial court and, unlike the standard for determining judgment as a matter of law, the court need not view the evidence in the light most favorable to the nonmovant. *See Allied Chem Corp. v. Daiflon, Inc.*, 449 U.S. 33, 36 (1980). Federal Rule of Civil Procedure 59(a) provides, in pertinent part:

A new trial may be granted to all or any of the parties and on all or part of the issues in an action in which there has been a trial by jury, for any of the reasons for which new trials have heretofore been granted in actions at law in the courts of the United States.

Fed. R. Civ. P. 59(a).

New trials are commonly granted where the jury's verdict is against the clear weight of the evidence, and a new trial must be granted to prevent a miscarriage of justice. *Advanced Cardiovascular Sys v. Medtronic Vascular, Inc.*, 485 F.Supp.2d 519, 523 (D. Del. 2007) (SLR). The court may not substitute its own judgment of the facts and assessment of the witnesses' credibility for the jury's independent evaluation. *Id.* "[W]here a trial is long and complicated and deals with a subject matter not lying within the ordinary knowledge of jurors a verdict should be scrutinized more closely by the trial judge . . ." *Id.* Because the jury's verdict in this case is against the clear weight of the evidence (and cannot be reconciled with the evidence), Andrew should receive a new trial if judgment as a matter of law is not granted in its favor.

B. The Issues On Which Andrew Respectfully Requests The Court Grant JMOL Or, Alternatively, A New Trial.

Andrew renews its JMOL motions and, alternatively, seeks a new trial on the following:

Infringement Issues: No direct or indirect infringement of claims 1, 22 or 31;
 No willful infringement.

Damages Issues: No lost profits damages;
 No “offer for sale” damages;
 No damages for future Saudi Telecom phases.

Andrew also moves for judgment as a matter of law, or alternatively a new trial, on three issues for which it bears the burden of proof: (1) its affirmative defense as a government contractor under 28 U.S.C. § 1498; (2) its fraud claim based on TP’s failure to declare the ‘144 patent as essential IPR and (3) its claim that TP is promissorially estopped from receiving a lost profits damages award on the ‘144 patent.

C. No Reasonable Jury Could Find Infringement.

TP argued three acts of infringement at trial:

1. An August 2005 demonstration of Geometrix in Ashburn, Virginia that TP asserts infringed claim 31 under 35 U.S.C. § 271(a). TP does not seek damages for this demonstration. A1005:2-11.
2. An alleged offer for sale from within the United States, to STC that TP asserts infringed claims 1 and 31 under 35 U.S.C. § 271(a). True Position sought \$45.3 million in “lost profits” damages for this alleged U.S. offer. A1005:2-5.
3. Shipments of Geometrix components to STC that TP asserts infringed claims 1 and 22 under 35 U.S.C. § 271(f). A1000:2-16. Although Andrew has shipped components only for phases 1 and 2 of the STC project, TP was awarded \$45.3 million in loss profit damages to cover all five phases of the deal, including phases on which it continues to bid.

For each of the above acts, the trial record demonstrates that TP failed, as a matter of law, to prove infringement of one or more limitations of the asserted claims, as well as various other threshold legal requirements for infringement under 35 U.S.C. § 271 for the Ashburn demonstration and the alleged offer for sale. Andrew addresses the threshold issues first, followed by the claim limitations missing from the accused products.

1. There Is No Evidence That An Offer For Sale Occurred In The U. S.

TP alleged at trial that Andrew made an infringing offer for sale to STC under 35 U.S.C. § 271(a). To be liable under § 271(a), the Patent Act first requires that the offer for sale be made from within the United States:

Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent therefore, infringes the patent.

35 U.S.C. § 271(a) (emphasis added). The Federal Circuit has unequivocally held patentees to the letter of the law, refusing to consider activities that take place outside the United States when analyzing a claim of infringement under § 271(a):

Extraterritorial activities . . . are irrelevant to the case before us because the right conferred by a patent under our law is confined to the United States and its territories, and infringement of this right cannot be predicated on acts wholly done in a foreign country.

Rotec Indus., Inc. v. Mitsubishi Corp., 215 F.3d 1246, 1251 (Fed. Cir. 2000) (quotation omitted); *See also MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1376 (Fed. Cir. 2005) (noting that it is “well-established that the reach of section 271(a) is limited to infringing activities that occur within the United States”). It is TP’s burden to prove the “offer for sale” occurred from within the United States. *See Rotec Indus. Inc.*, 215 F.3d at 1250; *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1333 (Fed. Cir. 2006) (“As the party asserting infringement, [patentee] ultimately bears the burden of proof.”).

Both the witness testimony and the documents presented to the jury demonstrate that Andrew’s offer to sell to STC occurred in Saudi Arabia, not within the United States. Andrew’s division President, Terry Garner, testified at trial that Andrew does not communicate directly with STC. Mr. Garner testified that Andrew’s communications with STC were hand-delivered by Andrew’s “employees, our salespeople or our agents.” A946:5-8. In fact, Mr. Garner

testified that Andrew has never done business with STC or ever conducted a meeting with STC in the United States. A946:11-12.

Mr. Garner's testimony is further supported by the bid documents themselves. The first document in Andrew's "Offer for the GSM VAS Project" is PTX 141 (essentially the "cover page" for the remaining documents, PTX 142-176).³ This Offer was submitted to the Procurement Department of STC in Riyadh by Andrew Middle East, located in Dubai, Saudi Arabia, not the United States. *See* A182; A204. Further, as the bid expressly states, the tender was not even delivered by Andrew Middle East, but rather was brought to STC by Al-Misehal, a Saudi-based company partnering with Andrew for the STC project. *See* A199.

TP did not present any evidence at trial to even suggest that Andrew's Offer to STC was made from within the U.S. TP did not cross Mr. Garner on the issue. TP presented no evidence that (a) the Offer documents were shipped from the U.S. directly to STC; (b) that Andrew sent any documents at all from the U.S. directly to STC; (c) that Andrew met with STC in the U.S.; (d) that Andrew communicated to STC in any way from the U.S. (let alone what the subject of those communications might have been); or (e) that the bid was prepared or priced within the U.S. The only evidence introduced at trial is that Andrew Middle East, in partnership with another Saudi entity, Al-Misehal, hand-delivered the offer to STC in Saudi Arabia.

To satisfy its burden of proof, TP must, at a minimum, show that Andrew communicated from the United States to STC a "manifestation of willingness to enter into a bargain, so made as to justify another person in understanding that his assent to that bargain is invited and will conclude it." *Rotec Indus., Inc.*, 215 F.3d at 1257 (internal quotation and citations omitted). In

³ Because only three of the "Offer" documents are themselves cited in this brief (PTX 141, PTX 146, PTX 157), Andrew has not included the entirety of the "Offer" documents (PTX 141-176) in the Appendix. Andrew can make the entirety of its "Offer" available, however, at the Court's request.

other words, the offer itself must be communicated from the United States to be covered by a U.S. patent.

In *Rotec*, the People's Republic of China solicited bids for a concrete placing system, and the defendants submitted a bid to supply the system. 215 F.3d at 1249. The patentee argued an offer for sale was made in the U.S. because the offering parties met several times in the U.S., a delegation from China visited one of the defendants, another defendant prepared pricing information and worked on finalizing design and financial aspects of the bid at offices in the U.S., and the offer provided that non-staple components were to be made in the U.S. and supplied from the U.S. *Id.* But it was undisputed that the bid proposal was finalized in Hong Kong, the bid was presented in China, all negotiations were in China, and the agreement itself was signed in China. *Id.* at 1250. The Court held extraterritorial activities were irrelevant, and it would not consider any such activities. *Id.* at 1251. Although the defendants may have “generated interest in [the] potential infringing product,” from within the U.S., the Court held that alone would be insufficient to rise to the level of an offer for sale. *Id.* at 1255. Without a communication from the U.S. with the third party purchaser, “it is difficult to imagine any commercial detriment of the rightful patentee taking place.” *Id.* The same result should apply here because there is no evidence that Andrew made an offer to STC from within the U.S.⁴

In sum, TP introduced no evidence at trial that Andrew made an actionable offer for sale to STC from within the United States. Because no reasonable jury could conclude otherwise, this Court should set aside the jury's verdict of direct infringement related to Andrew's offer for

⁴ When Andrew moved for Judgment As A Matter of Law at trial on this issue, TP relied on *Wesley Jessen Corp. v. Bausch & Lomb, Inc.* to argue that it does not matter where the actual sale takes place. A795:25-A796:9. *Wesley Jessen*, however, only holds that it does not matter where the actual sale takes place so long as the offer to sell is made from within the United States. 256 F. Supp. 2d 228, 233 (D. Del. 2003). Here, as shown above, no offer to sell was made from within the United States, so *Wesley Jessen* is inapposite here.

sale to STC.⁵ In the event the Court does not grant judgment as a matter of law, a new trial is warranted because the jury verdict was clearly against the weight of the evidence.

2. Andrew's Ashburn Demonstration Also Is Not Actionable Because It Was Work Done For The U.S. Government.

TP alleged at trial that Andrew's August 2005 Ashburn demonstration infringed claim 31. A1005:2-11; A953:9-12. The uncontroverted testimony at trial is that this August 2005 Ashburn demonstration was for the U.S. government, and accordingly not actionable in district court under 28 U.S.C. § 1498(a). Indeed, although counsel for TP contended that the Ashburn demonstration was for STC, the only evidence at trial establishes that any STC demonstration occurred in Saudi Arabia.

At trial, Andrew's division president, Terry Garner, provided un rebutted testimony that the Ashburn demonstration was for the government. *See* A943:2-A945:13 (direct examination); A952:20-A954:18 (cross-examination). TP cannot assert a claim against Andrew for work done on behalf of the government. 28 U.S.C. § 1498(a). Because the un rebutted evidence of record is that the Ashburn demonstration was for the government, Andrew cannot be liable for it and the jury's verdict of infringement for the Ashburn demonstration should not stand. In the event the Court does not grant judgment as a matter of law, a new trial is warranted because the jury verdict was clearly against the weight of the evidence.

⁵ If Andrew's offer for sale was not an infringing activity, then TP is not entitled to any damages for it. The only remaining allegedly infringing activities are the Ashburn demonstration and the actual supply of components to Saudi Arabia. TP offered no evidence at all to support a damages award based on the Ashburn demonstration. TP's damages claims for the actual shipment of components are speculative and no reasonable jury could have determined TP was entitled to lost profits, as explained in Section IV(G) below.

3. TP Failed To Prove Literal Infringement Of Any Claim As A Matter Of Law.

For the jury to have found infringement, it had to have been literal infringement.⁶ Literal infringement requires the presence of each limitation, exactly as written in the claim. *E.g.*, *DeMarini Sports, Inc. v. Worth, Inc.*, 239 F.3d 1314, 1331 (Fed. Cir. 2001) (“Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, i.e., when the ‘properly construed claim reads on the accused device exactly.’”) (citations omitted). If any limitation is not present exactly as written in the claim, there can be no literal infringement as a matter of law. *E.g.*, *Litton Sys., Inc. v. Honeywell, Inc.*, 140 F.3d 1449, 1454 (Fed. Cir. 1998) (affirming JMOL of no literal infringement and holding “any deviation from the claim precludes a finding of literal infringement”).

The record does not support the jury’s finding of literal infringement of claim 1, 22 or 31. Based on the Court’s claim constructions and the evidence of record, no reasonable jury could find any of the following limitations literally present in Andrew’s accused products:

Claim	Limitations Not Literally Present Based on the Record
1, 22, 31	“one of a prescribed set of reverse control channels”
1, 22	the means limitations having the figure 8 “cell site” structure
22	locating means for automatically determining
22	database accessible to remote “subscribers”
1	central site processing comprising . . . means for processing
1	sampled baseband signal formatted into frames of digital data

⁶ At trial, TP did not offer any evidence of infringement under the doctrine of equivalents. At the close of TP’s case, Andrew moved for judgment as a matter of law of no infringement under the doctrine of equivalents. A784:19-25. TP stipulated to Andrew’s motion. A844:6-11. Accordingly, the jury was not instructed on the doctrine of equivalents (D.I. 291), and the special verdict form did not have any questions about the doctrine of equivalents. D.I. 292. The doctrine of equivalents was not presented to the jury.

31 “time stamp bits representing the time at which said frames were produced at each cell site”

4. An SDCCH Cannot Literally Be “One Of A Prescribed Set Of Reverse Control Channels” Under The Court’s Claim Construction.

Each asserted claim requires “one of a prescribed set of reverse control channels.” A129 at 20:4-34, A131 at 23:56-24:2, 24:51-68; *see also* A660:8-11. The Court construed “prescribed set of reverse control channels” to mean “[a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site.” D.I. 257 at 1. “One” of this “prescribed set of reverse control channels” is one channel in this predetermined range of frequencies used to transmit control information in only one direction.

At trial, TP argued an SDCCH channel in the GSM cellular system satisfies the “reverse control channel” limitation. A530:16-A531:2. No reasonable jury could determine that an SDCCH literally meets the Court’s construction of “a prescribed set of reverse control channels” for at least two reasons: an SDCCH does not use a “predetermined range of frequencies” and it does not “transmit control information in only one direction, from a cellular telephone to a cell site.” D.I. 257 at 1. “Judgment as a matter of law of no literal infringement is appropriate if no reasonable fact finder could determine that the accused devices meet every limitation of the properly construed claims.” *Elkay Mfg. Co. v. Ebco Mfg Co.*, 192 F.3d 973, 980 (Fed. Cir. 1999) (reversing district court and holding judgment as a matter of law of no literal infringement should have been granted).

The SDCCH channel is part of the ETSI-standardized GSM cellular system. A57 at 1.5. Unlike the ‘144 patent, GSM is based on a fundamentally different architecture for which the SDCCH specifically was invented. A743:1-A744:5, A746:16-23. Using innovations unrelated to UTDOA, GSM made dramatic improvements over earlier systems by abandoning the predetermined control channel architecture of prior cellular systems. A748:3-A749:9; A752:6-

14. GSM uses a variable approach where SDCCHs hop from frequency to frequency thereby reducing frequency-specific dead spots. A750:3-16. GSM also abandoned the use of a reverse control channel for most purposes in favor of new bi-directional control channels, which are single channels that communicate in both the uplink (reverse) and downlink (forward) directions. A746:24-A747:14; A743:18-A744:3; A767:7-22.

a. An SDCCH Is Not A “Predetermined Range Of Frequencies” Under The Court’s Claim Construction.

Use of a predetermined range of frequencies is a fundamental element of the invention disclosed and claimed in the ‘144 patent. Each claim and each embodiment disclosed in the specification requires one of a predetermined set of reverse control channels. TP added the “reverse control channel” limitation during prosecution to distinguish its claims over the prior art. A29; A30-A32; A33-A36; A37-A42. TP originally tried to get claims directed to “control channels” generally, but the Patent and Trademark Office (“PTO”) rejected each of those claims. *Id.* Once TP amended its claims to specify “reverse control channels,” instead of “control channels,” the PTO allowed the claims. A33-A36.

TP did not amend the claims merely to specify the direction of signal flow, as TP argued at trial. A575:22-A577:6. The unamended claims already specified the direction of signal flow by requiring the cellular phone to initiate or emit the signals. A30-A32. Rather, TP’s amendments limited the claims to a specific type of channel called a “reverse control channel.” A33-A36.

Recognizing the importance of the reverse control channel to all asserted claims, the Court required in its claim construction that a reverse control channel have a “predetermined range of frequencies” and rejected TP’s argument that defined a channel solely by the direction of signal transmission. D.I. 257 at 2 (“The Court declines to embrace plaintiff’s implied

suggestion that is the signal that defines the channel at any given time; i.e., there are no ‘prescribed sets’ of reverse control channels”). Despite the Court’s construction, TP presented to the jury a theory of infringement that reads the “predetermined range of frequencies” limitation out of the claims. However, based on the undisputed record concerning the operation of Andrew’s Geometrix products, there can be no infringement as a matter of law.

No reasonable jury could determine that an SDCCH uses one of a predetermined range of frequencies, because the undisputed evidence of record is that an SDCCH changes frequencies over 200 times a second and can transmit anywhere in the operational range of the product, rather than in any predetermined range. The record conclusively establishes that an SDCCH changes frequencies, i.e. frequency hops, over 200 times a second. A847:12-A848:11; *see also* A749:10-A752:5. The GSM standard introduced into evidence specifies GSM channels frequency hop. A85. Both the GSM standard as well as Andrew’s technical documents specify STC requires frequency hopping in the system where Andrew’s accused Geometrix products operate:

The BSS shall support both baseband and synthesized frequency hopping as defined by the relevant ETSI standard.

A176 at 4.15.7; *see* A85.

Hopping was further confirmed by the un rebutted testimony of Andrew’s technical expert, Dr. David Goodman:

Q: Now, you’ve shown this hopping with the SDCCH. Is the SDCCH a hopping channel in GSM?

A: Yes. Practically all the channels are hopping. I’ve been referring to voice channels hopping around because they do that. And the SDCCH also has to hop around.

Q: And do you know whether the SDCCH that’s being used in Saudi Arabia with the Geometrix system is a hopping --

A: Yes. That's my information. It is.

A752:6-14. Dr. Goodman also provided uncontested testimony that frequency hopping prevents an SDCCH from having a "predetermined range of frequencies":

Q. Okay. And can you, using the Court's claim construction, describe how, if at all, frequency-hopping is relevant to whether or not Claims 1, 22 and 31 are being used in Geometrix?

A. Yes. There's nothing predetermined about the range of frequencies, and, in fact, it doesn't even stay in one range of frequencies. It just jumps all over the place, 217 times a second. And you don't even know from one task to another whether it's going to jump over the same frequency.

So each time the GSM core network tells GCS what it has to do, it has to say what hopping pattern am I using now? Where do I started? How do I find this? And GCS has to tell this to the WLSs. What it knew ten seconds ago to do one task is totally irrelevant to what it will have to do next. The SDCCH will have to be hopping over different frequencies.

So it's not predetermined at all. It's just – it just happens to the fly and it's changing all the time.

A778:10-A779:4.

TP did not cross examine Dr. Goodman on frequency hopping or introduce any testimony from its technical expert or other witnesses on frequency hopping. Nor did TP introduce any documentary evidence demonstrating SDCCHs do not frequency hop. Rather, the un rebutted record establishes that SDCCHs in GSM and the accused products use a variable constantly changing frequency technique (frequency hopping) and, therefore, are the opposite of the predetermined frequencies approach of the '144 patent and its claims.

Even without the frequency hopping, the evidence of record demonstrates an SDCCH is not a predetermined range of frequencies. Dr. Goodman provided uncontested testimony that an SDCCH may be located anywhere in the GSM frequency band. A782:25-A783:5; A748:19-A749:6; A778:10-A780:4; A741:13-A742:22. TP's infringement expert, Dr. Oded Gottesman, admitted the control channels in STC's GSM system, including the SDCCH, may be anywhere

among 124 different channels, each with a different frequency range. A683:10-23; A102. In direct contrast with the “one of a prescribed set of reverse control channels” required by each asserted claim of the ‘144 patent, no predetermined range of frequencies is set for the SDCCH. Rather, the SDCCH is free to float throughout the operational range of the system.

Based on the above undisputed evidence of record, no reasonable jury could find an SDCCH uses one of a “predetermined range of frequencies.” *See Summit Tech., Inc. v. Nidek Co., Ltd.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004) (affirming JMOL of no literal infringement and holding, “We observe that juries, in considering the evidence at trial, are required to fully consider and weigh all of the evidence presented at trial”).

b. TP’s Only Argument For A “Predetermined Range Of Frequencies” Is Inconsistent With The Court’s Claim Construction.

TP hinged its entire infringement case on arguing an SDCCH is a “predetermined range of frequencies” because it must transmit somewhere within the operational range of a GSM system (i.e., the frequency band). *See e.g.*, A534:11-A536:10; A577:9-14. Dr. Gottesman summarized the argument as follows:

A: . . . So the SDCCH channel can be transmitted in the reverse direction, in the uplink direction, on the range of frequencies between 890 megahertz to 915 megahertz. So this is the prescribed set of frequencies that only there the SDCCH channel on the GSM 900 cellular network can be transmitted.

There is another specification for the downlink, the other direction, namely the forward direction that goes from the antenna down to the phone. . . And those transmissions of information can be only in the range, in another range of frequency, which is between 935 megahertz and 960 megahertz.

A534:23-A535:10; *see also* A577:1-6; A230. Thus, under TP’s theory of infringement, any channel would be a predetermined range of frequencies because all equipment will have some operational range that sets an upper and lower frequency. TP advanced no other theory for infringement at trial.

TP's infringement position, however, is inconsistent with this Court's claim construction and therefore cannot support the jury's verdict. *See, e.g., Medtronic, Inc. v. Advanced Cardiovascular Sys.*, 248 F.3d 1303, 1309 (Fed. Cir. 2001) (“[T]he properly construed claims must be compared to the accused device.”) (emphasis added). In its *Markman* ruling addressing the “range of frequencies” limitation, the Court rejected TP's position and held “the phrase ‘range of frequencies’ is an accurate and helpful description of what a ‘channel’ is.” D.I. 257 at 2 (emphasis added). Thus, the “range of frequencies” in the Court's construction refers to the channel. The channel at issue here is the SDCCH. TP, however, consistently applied the Court's “range of frequencies” construction against the entire GSM frequency band, not the accused SDCCH channel. Indeed, it was the upper and lower bound of the GSM frequency band that TP argued at trial was the “predetermined range of frequencies.” A534:23-A535:3; A536:1-10; A539:13-23; A577:1-6. TP does not dispute that the SDCCH channel itself can be anywhere within the available frequency band and changes frequencies more than 200 times per second. A683:10-23; A102; *see also* A530-A531. A channel that can be anywhere in the frequency band and has a constantly varying frequency cannot satisfy the Court's “predetermined range of frequencies” construction as a matter of law.

c. An SDCCH Cannot Satisfy The Court's Claim Construction Because It Does Not Transmit In Only One Direction.

The Court's construction of “prescribed set of reverse control channels” requires “[a] predetermined range of frequencies that transmit control information in only one direction, from a cellular telephone to a cell site.” D.I. 257 at 1 (emphasis added). The evidence of record does not demonstrate that an SDCCH transmits control information in only one direction. Thus, there can be no literal infringement as a matter of law.

The GSM network is the only cellular network at issue here. Dr. Gottesman admitted the only GSM channel that transmits control information in only one direction, from a cell phone to a cell site (i.e., reverse or uplink direction), is the Random Access Channel (RACH) channel. A662:7-A663:17; *see also* A782:14-24; A60. TP does not accuse the RACH of infringement in its case, and the RACH is not used by Geometrix. A782:14-24.

Unlike a RACH, the accused SDCCH channel is bi-directional — i.e., it transmits information from a cell phone to a cell site and also from a cell site to a cell phone. The GSM standard introduced in evidence specifies an SDCCH is bi-directional A57 at 1.5. Dr. Gottesman conceded on direct examination that an SDCCH is bi-directional:

Q: By the way, does the S[D]CCH also go in a forward direction?

A: The term, S[D]CCH, is generally used to describe stand-alone control channel that can have direction in forward direction and backward direction. It transmits information, different information in each direction.

...

A576:6-11. Dr. Goodman's testimony is in accord. A766:16-A767:13. Although an SDCCH may only be transmitting in one direction at a time, in its *Markman* Order, the Court rejected TP's argument that the direction of the signal transmission defines the channel at any given time. D.I. 257 at 2 ("The Court declines to embrace plaintiff's implied suggestion that is the signal that defines the channel at any given time; i.e., there are no 'prescribed sets' of reverse control channels").

Because it is undisputed that it is bi-directional, an SDCCH cannot literally satisfy the Court's construction of "transmit[ting] control information in only one direction." D.I. 257 at 1 (emphasis added). This is another reason why the jury's infringement verdict should not stand.

5. TP Has A Failure Of Proof On The Structure Required For The Means-Plus-Function Limitations Of Claims 1 And 22.

Claims 1 and 22 both include means-plus-function claim terms. A129 at 20:4-34; A131 at 23:56-68. The Court's *Markman* Order specifies that the structure required for each limitation includes portions of Figures 7 and Figures 8A-8E of the '144 patent, D.I. 257 at 4 (emphases added):

Limitation	Required Structure
Means for processing (claim 1)	a computer processor programmed to perform the algorithm disclosed at col. 13, ll. 33-56 (ending with the acronym "TDOA"); Fig. 7 at the first four blocks and table; col. 17, ll 26-68 (minus any reference to "frequency difference data" or "frequency difference results"); and <u>Figs. 8A-8B</u> (minus any reference to "frequency differences"); or equivalents of such a computer processor.
Means for determining (claim 1)	a computer processor programmed to perform the algorithm disclosed at col. 13, l. 58 (beginning with the word "This") through col. 13, l. 62 (ending with the letter "C"); Fig. 7 at the fifth and sixth blocks; col. 18, ll 1-34 (ending with "0.0001," but minus any reference to "frequencies"); and <u>Fig. 8C through top four elements of Fig 8D</u> (minus any reference to "frequencies"); or equivalents of such a computer processor.
Locating means (claim 22)	a computer processor programmed to perform the algorithm disclosed at col. 13, ll. 33-62 (ending with the letter "C"); Fig. 7 at the first six blocks and table; col. 17, l. 26 – col. 18, l. 34 (ending with "0.0001," but minus any reference to "frequency difference data," "frequency difference results," or "frequencies"); and <u>Figs. 8A through the top four elements of Fig. 8D</u> (minus any reference to "frequency differences" or "frequencies"); or equivalents of such a computer processor.

In specifying the structure required for the means-plus-function claim terms, the Court provided meticulous detail. The Court specified the precise columns and line numbers of the

patent specification text that form part of the required structure. When the Court did not include an entire line of text in the required structure, the Court noted where within the particular line of text the required structure begins and ends. The Court at times excluded specific words in the text from the required structure and noted that in its construction. The Court provided an equally detailed analysis for the patent figures included within the required structure. The Court noted which blocks of the figures are required. The Court noted which specific words in the figures are and are not included in the required structure. The Court could not have been more specific.

At trial, however, TP failed to compare any structure in Figures 8A-8E with the accused Geometrix system. TP's infringement proofs only addressed the Figure 7 portions of the Court's construction. Figure 7 is the flow chart steps of only "the processing performed by the central site system." A126 at 13:33-34 (emphasis added). Figure 7 not only omits significant structure contained in the central site, but does not address any processing at the "cell sites" required by each claim.

TP's infringement claims at trial relied on, and required, processing at the cell sites to make out a claim of infringement. *See* A517:2-6; A517:22-A518:1; A520:5-16; A522:9-11; A572:20-A573:1. Without proving Andrew's accused products incorporate the same or equivalent structure as both the central site and cell site structure of Figure 8, the trial record fails to support a finding of infringement as a matter of law.

Dr. Gottesman, TP's only witness on the issue, conceded all the structure, including Figures 8A-8E, should be compared to the accused Geometrix system for the infringement analysis. A656:21-A657:16. But when it came to his infringement analysis, Dr. Gottesman did nothing more than a functional comparison of portions of Figure 8. *See* A608. He testified the Figure 8 structure was nothing more than "adding details or [giving] description . . . of

performing the blocks in Figure 7.” A606:12-18. He provided no analysis of how or why the Figure 8 structure is the same or equivalent to the structure in Geometrix. The sum total of his “analysis” was:

Q: So is it your opinion that the Geometrix source code does the substantially -- does substantially same as Figure 8A through the top four elements of Figure 8D?

A: Yes.

A608:13-16.

The only comparison in the record regarding Figure 8 structure came from Andrew’s technical expert, Dr. Goodman, who testified in detail why the Figure 8 structure was not present literally or equivalently in Andrew’s accused products. *See* A840:18-A841:19; A808:13-A841:19.

By not comparing the Figure 8 structure to the accused Geometrix products, TP effectively rewrites the Court’s claim construction and makes the Court’s decision to include specific text and specific boxes in four specific figures (Figures 8A, 8B, 8C and 8D) irrelevant to the infringement analysis, in direct contravention of black letter law. *See Cross Med. Prods. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1315 (Fed. Cir. 2005). TP’s failure to present evidence of the entire means-plus-function structure is a fundamental failure of proof on claims 1 and 22. *CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1178 (Fed. Cir. 2005). For example, in *CytoLogix*, the patentee failed to compare the structure for a “temperature controller means” to the structure of the accused device. *Id.* The Federal Circuit held the patentee therefore “failed to present substantial evidence of infringement” and it reversed the jury verdict of infringement. *Id.* The Federal Circuit further held “it is insufficient for the patent holder to present testimony based only on a functional, not a structural, analysis.” *Id.* (citations and internal quotations omitted). TP did here exactly what the Federal Circuit found insufficient in

CytoLogix — a failure of proof on structure. See also *See Cross Med. Prods.*, 424 F.3d at 1315 (“Because structural equivalents under § 112, ¶ 6 are included within literal infringement of means-plus-function claims, the court must compare the accused structure with the disclosed structure, and must find equivalent structure as well as identity of claimed function for the structure.”) (citations and internal quotations omitted). TP failed as a matter of law to prove infringement of either claim 1 or 22.⁷

6. There Is Insufficient Evidence Of Literal Infringement Of The “Locating Means For Automatically Determining” In Claim 22.

Claim 22 requires “locating means for automatically determining the locations of said cellular telephones by receiving and processing signals emitted during said periodic reverse control channel transmissions.” A131 at 23:63-66. The “locating means” is the limitation in the claim that performs the entire location process.

In construing the “locating means” limitation in its *Markman* Order, the Court held “the function of the disclosed structure is to determine, without a specific request to do so, the locations of cellular telephones by receiving and analyzing the signals that the cellular telephones broadcast periodically over the reverse control channel.” D.I. 257 at 4 (emphasis added).

The jury’s infringement finding on claim 22 cannot stand unless there is sufficient evidence in the record to show the accused Geometrix system literally performs the claimed

⁷ When Andrew moved for Judgment As A Matter Of Law on this issue at the close of TP’s case, TP tried to defend its position by citing *Caterpillar Inc. v. Deere Co.*, 224 F.3d 1374 (Fed. Cir. 2000). *Caterpillar* does not support TP’s position. The issue in *Caterpillar* was whether the district court erred in granting summary judgment of no equivalence infringement of a means-plus-function limitation. The Federal Circuit held the district court erred in ruling there could be no equivalence just because the accused structure lacked portions of the structure disclosed in the specification. *Id.* at 1380 (“the district court conducted an impermissible component-by-component analysis to determine that no reasonable jury could find structural equivalence.”). *Caterpillar* did not present the issue raised here of whether the structural comparison must be done in the first place. Indeed, in *Caterpillar* that comparison was in fact conducted. *Id.*

function of determining a cell phone's location without a specific request to do so. *E.g., Ishida Co., Ltd. v. Taylor*, 221 F.3d 1310, 1316 (Fed. Cir. 2000) ("Literal infringement of a claim with a means-plus-function clause requires that the accused device perform a function *identical* to that identified in the means clause.") (emphasis added). The evidence of record is undisputed that the accused Geometrix system will not locate a phone unless it is specifically requested to do so — the opposite of what the claim requires.

a. Geometrix Will Not Determine A Cell Phone's Location Without A Specific Request To Do So.

The Geometrix design documents introduced into evidence confirm the accused Geometrix system locates only when specifically request to do so. *See* A64-65.

Dr. Gottesman agreed. Dr. Gottesman conceded on direct examination that the overall Geometrix location process "starts by some request that comes from the user":

Q: Okay. Now, let me ask you this: The determining without a specific request to do so, this overall process that's going on in Geometrix, is that the overall process -- is that as a result of a request or not?

A: The overall process starts by some request that comes from the user of some software that sends some request for determining location of -- targeting certain phone.

A579:14-21; *see also* A579:22-A580:8.

Dr. Gottesman reiterated on cross examination that Geometrix will not locate a phone unless it is specifically requested to do so:

Q: In the Geometrix system, you get a request and then the system performs a location, a measurement, and then it returns to the system the longitude and latitude of that phone; right?

A: Yes.

Q: All right. And until it gets another request, it's true, isn't it that Geometrix will not perform any more locations, right?

A: If it doesn't get any more requests?

Q: That's right.

A: That is correct.

A667:19-A668:4; *see also* A669:9-24.

Dr. Gottesman made it clear that Geometrix's location processes will not operate unless there is a specific request to locate a phone:

Q: Without a request, there's going to be no collection of times, no calculation of times of arrival, no calculation of time differences of arrival and no calculation of a location of the phone without that specific request; is that right?

A: That is correct.

A669:25-A670:5.

Thus, the undisputed evidence at trial from TP's own technical expert was that Geometrix will not determine a cell phone's location unless specifically requested to do so. This Court held the function of the "locating means" of claim 22 is to determine a cell phone's location "without a specific request to do so" D.I. 257 at 4 (emphasis added). Because the undisputed evidence is that Geometrix does not perform the claimed function and in fact does the opposite of what the claim requires, no reasonable jury could find Geometrix literally infringes claim 22. *Elkay*, 192 F.3d at 980 ("If even one limitation is missing or not met as claimed, there is no literal infringement.").

b. TP's Sole Infringement Argument Misapplies The Court's Claim Construction.

At trial, TP's infringement proofs hinged on its argument that Geometrix literally satisfies the claimed function of determining a cell phone's location "without a specific request to do so" because once Geometrix starts its computerized processing based on a specific request, "it doesn't need any additional request to come and to tell it what to do. It just does it automatically." A581:6-8. Dr. Gottesman, the only witness TP put forward on the issue, based

his opinion on an interpretation of the claim that conflicts with the Court's construction and makes no sense:

Q: Okay. So just so it's clear, what you're saying is that the jury would have to interpret this claim in such a way that in the two seconds it takes from getting the actual request, a specific request from the network to do a location, for the system to not be automatic, in the middle of the normal processing of all the data, there would have to be another human being in that two-second period who interposes another request to finish the process; is that right?

That's what you are saying would be not automatic?

A: That is my understanding of the claim language, which matters, and the Court's construction of this.

A672:1-13.

Neither Dr. Gottesman nor TP contest that Geometrix cannot and will not locate any phones without a specific request. In fact, Dr. Gottesman admitted that if the Court's construction means that the location process itself must be done without a specific request, there is no infringement:

Q: Now, it's a fact, isn't it, that if the jury were to conclude that the Court, by saying automatic means without a specific request, refers to the entire location process, that Geometrix requires a specific request and, therefore, would not infringe?

A: It would not infringe that particular step. But it may infringe on other claims.

Q: I'm not talking about other claims. I'm talking about that claim. So it's correct under that set of circumstances the Geometrix product would not infringe; right? Claim 22?

A: If that was the case.

A672:16-A673:3.

Dr. Gottesman's faulty analysis does not provide sufficient evidentiary support for the jury's finding that claim 22 is infringed. There simply is no evidence in the record to support the jury's verdict, and it should not stand.

7. Geometrix Does Not Have A Database Remotely Accessible To Subscribers As Required By Claim 22.

The term “subscribers” appears twice in claim 22. It appears in the first line of the claim which specifies “[a] ground-based cellular telephone system serving a plurality of *subscribers* possessing mobile cellular telephones.” A131 at 23:56-59 (emphasis added). It appears again in the last line of the claim as follows: “database means for storing location data identifying the cellular telephones and their respective locations, and for providing access to said database to *subscribers* at remote locations.” A131 at 23:67-24:2 (emphasis added).

At trial, TP’s only witness on the issue, Dr. Gottesman, agreed “subscribers” in the first line of the claim means cell phone subscribers. A676:10-18. Dr. Gottesman admitted Andrew does not infringe if “subscribers” has the same meaning in the last line of the claim:

Q: I know you say the word has different meanings in different places, but it is a fact, isn’t it, that if the jury were to conclude that the use of subscribers in the last element is referring to people who have cell phones and subscribe to networks, that the Andrew’s system does not give access to subscribers in that meaning to the database and there would be no infringement?

A: If those conditions were true, then the answer is yes. Again, to infringement of Claim 22.

A680:8-16; *see also* A679:8-21. Dr. Gottesman also admitted there is no evidence of any cell phone subscribers accessing any Geometrix database as the claim requires. A679:8-9.

Dr. Gottesman instead testified “subscriber” should have two different meanings in the same claim:

Q: Okay. My question was: Isn’t it true that if the claim use of subscriber at the top in the preamble, the introduction to the whole claim, has to be the same subscriber, the same subscriber in the bottom, talking about the database?

A: Absolutely not.

A679:16-21. He testified the “subscriber” in the last line of the claim is STC — a different “subscriber” than the “subscriber” in the first line of the claim. A678:16-23. He then claimed

STC had access to a Geometrix database. A679:9-15. TP advanced no other infringement theory for this limitation.

The jury's infringement finding for claim 22 cannot stand if "subscriber" is construed consistently throughout the claim. The Federal Circuit has emphasized there is "a presumption that the same terms appearing in different portions of the claims should be given the same meaning unless it is clear from the specification and prosecution history that the terms have different meanings at different portions of the claims." *PODS, Inc. v. Porta Stor*, 484 F.3d 1359, 1366 (Fed. Cir. 2007); *see also Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001). There is nothing in the '144 patent specification or prosecution history to indicate "subscriber" should be construed two different ways in the same claim.

The prosecution history does not address the issue. *See* A29-A42. The '144 patent specification consistently refers to a "subscriber" as a cell phone subscriber — exactly how Dr. Gottesman agreed it should be construed in the first line of the claim. The specification does not refer to "subscriber" as being a cellular network operator as TP argues it means in the last line of the claim. For example, the specification states (emphases added):

- "New subscribers, apparently recognizing the many advantages in being able to initiate and receive calls while away from home, are being enrolled in ever-increasing numbers. Indeed, in many cities, the competition between the A and B sides to enlist new subscribers is fierce. Accordingly, there is a great need for new services to offer current and potential subscribers." A121 at 3:42-49.
- "a location system in accordance with the present invention could control the frequency of control channel transmissions and offer different subscribers different location information update rates" A121 at 4:47-50.
- "offer subscribers billing rates that vary on the basis of the location" A129 at 19:9-10.
- "a location tape, containing a record over time of the locations of the subscribers' cellular telephones, may be merged with a billing tape to produce a modified billing tape" A129 at 19:11-14.

The meaning of “subscriber” is an issue of law for the Court to decide. *See PODS, Inc.*, 484 F.3d at 1366 (reversing district court for construing the terms “carrier frame” and “around” differently in different claims). Because the specification and prosecution history do not require “subscriber” to be construed two different ways in the same claim, and because it is undisputed that there is no infringement if “subscriber” is construed consistently, the jury’s infringement finding on claim 22 cannot stand.

8. The “Means For Processing” Limitation Of Claim 1 Is Not Literally Present In Geometrix.

Claim 1 requires a central site system that includes a “means for processing”:

a central site system operatively coupled to said cell site systems, comprising: means for processing said frames of data from said cell site systems to generate a table identifying individual cellular telephone signals and the differences in times of arrival of said cellular telephone signals among said cell site systems.

A129 at 20:25-31 (emphases added). To satisfy the claim literally, the “means for processing” must reside at the central site. The issue here relates solely to the physical location of the “means for processing.” It does not relate to the particular structure required for the “means for processing,” so no § 112, ¶ 6 equivalence question is presented.

TP argued at trial that the Geometrix GCS is the “central site system” required by claim 1. A520:5-16; A522:3-4; A524:8-13. Thus, to prove literal infringement, TP was required to prove the GCS (the alleged central site) has the “means for processing” structure specified in this Court’s claim construction order, or its equivalent. “Cross correlation” is part of the structure for the “means for processing” limitation. *See* D.I. 257 at 3, referencing ‘144 patent Figure 7; A112 (Figure 7). To prove literal infringement, it is not enough for TP to show another Geometrix component has the required “cross correlation” structure. TP had to demonstrate the GCS has the “cross correlation” structure required by the limitation, or its equivalent structure. Without making that proof, TP cannot establish literal infringement of Claim 1.

TP argued at trial that Geometrix performs “cross correlation” as part of an “ambiguity function.” A586:3-8; A591:12-17, *see also* A592:13-18. The undisputed trial testimony is that the ambiguity function in Geometrix is not performed or calculated in the GCS, as would be required for infringement. Rather the undisputed trial testimony is that the ambiguity function in Geometrix is performed and calculated in another component called the WLS, which TP argued at trial is the “cell site” in the claim, not the central site where the “means for processing” should occur. A517:2-6; A522:9-11; A583:23-A584:2; A522:9-11; A524:2-7; A572:20-A573:1. Indeed, Dr. Gottesman conceded on direct examination that the “cross correlation” results are provided to the GCS:

- A. And so that was performed, the cross-correlation was performed in a function called ambiguity, compute ambiguity function, and the result of that arrived to the central computer and the function called allocate memory used that result and continued that processing to perform this function.

A586:3-8. If they are provided to the GCS, they are not calculated in the GCS as the claim requires.

Because TP admits the ambiguity function (alleged “cross-correlation”) is not performed at the GCS (alleged central site system in the claim), there can be no literal presence of the “means for processing” limitation and thus no literal infringement of claim 1.

9. Geometrix Does Not Process Sampled Baseband Signals Into Frames Of Digital Data As Claim 1 Requires.

Claim 1 includes a limitation that reads: “sampling said baseband signal at a prescribed sampling frequency and formatting the sample signal into frames of digital data.” A129 at 20:18-21. The jury’s infringement finding on claim 1 cannot stand unless the record has sufficient evidence of Geometrix literally satisfying this limitation. This limitation is not a means-plus-function limitation.

TP argued at trial that a computer message in Geometrix called a “df_results_msg” is the “frames of digital data” required by claim 1. A628:25-A629:4. But there is no evidence in the record that the “df_results_msg” contains sampled baseband signals as claim 1 requires. The only alleged “infringement proof” in the record is Dr. Gottesman’s brief testimony:

Q: The sampling sub-system coupled to baseband converter for sampling said baseband signal at a prescribed sampling frequency, into frames of digital data.

A: Yes. So something sub-system is the analogue to digital converter on the middle right. And all the blocks to the left, having to the left, all the blocks to the left. These are altogether processing the frames and this is a something sub-system.

A627:21-A628:3.

Nowhere in Dr. Gottesman’s testimony or elsewhere does TP establish the “df_results_msg” contains sampled baseband signals, which TP was required to do to prove literal infringement. Indeed, the “df_results_msg” frame structure introduced into evidence at trial is completely absent of any “baseband signals” field. A68-69. Dr. Goodman’s testimony that, due to its de-centralized architecture, Geometrix could not support sampled baseband signals in the “df_results_msg” is unrebutted in the trial record. A803:16-A805:17.

No reasonable jury could conclude TP proved the literal presence of sampled baseband signals in the “df_results_msg.” The jury’s verdict of infringement of claim 1 should not stand.

10. Geometrix Does Not Have “Time Stamp Bits Representing The Time . . . Frames Were Produced At Each Cell Site” As Claim 31 Requires.

Claim 31 requires “frames of data, each frame comprising a prescribed number of data bits and time stamp bits, said time stamp bits representing the time at which said frames were produced at each cell site.” A131 at 24:58-61. The Court did not construe this limitation in its *Markman* Order. This is not a means-plus-function limitation.

This claim limitation requires a very precise measurement: the exact time “frames of data” “were produced at each cell site.” *Id.* (emphasis added). At trial, TP argued Geometrix’s “df_results_msg” is the “frames of data” required by claim 31. A449:1-A550:7. For TP to prove literal infringement, it was required to prove at trial that the “df_results_msg” includes a field that literally represents the time the “df_results_msg” was produced at each cell site.

The “df_results_msg” does not have any field containing the time it was produced. The “df_results_msg” frame structure introduced into evidence confirms this. A68-A69.

At trial, Dr. Gottesman pointed to two fields in the “df_results_msg” as allegedly representing the time the df_results_msg was produced — the “time of arrival (TOA)” field and “actual start time” field. *See* A449:16-17; A550:25-A551:8; A555:19-23; A560:14-A561:5; A561:10-17. Neither field can field literally satisfy the claim language. Indeed, Dr. Gottesman conceded on direct examination that the “time of arrival” measurement is not the time the “frame” (i.e., df_results_msg) was produced:

Q: So is it correct that there’s an ever so slight difference between the time of arrival of a signal at the cell site and the time at which the frame is produced thereafter?

A: Yes. The actual time of arrival is the actual time that the frame start being produced, that the signal start being received. And that TOA field tells, with respect to that, what is the time of arrival of the signal that came slightly after the actual reception start being performed within the WLS.

The WLS start collecting stuff, collecting data, and shortly after, it identified the time of arrival.

So that field describes where the time of arrival actually occurred.

A551:15-A552:3 (emphasis added); *see also* A559:23-25. He also conceded on direct examination that the time of arrival precedes the time the “frame” (i.e., df_results_msg) is produced:

Q: The signal is received at the cell site and there's a time of arrival that you calculate; is that right?

A: Right.

Q: And then a little bit after that, the frame is produced from that signal; is that right?

A: Right.

A547:9-16 (emphasis added).

Thus, Dr. Gottesman's direct testimony demonstrates the time of arrival, or TOA, is too early to literally represent the time the "frames were produced at each cell site." The "time of arrival" cannot literally satisfy the claim language.

The only other field Dr. Gottesman pointed to as a candidate for satisfying this limitation is the "actual start time." The undisputed evidence in the trial record is that "actual start time" is even earlier than the time of arrival, which means it cannot satisfy the claim language either. The "actual start time" is the time the Geometrix WLS component started collecting time of arrival measurements. A800:16-24; A555:16-21. Dr. Gottesman conceded on direct examination that the WLS starts collecting the data before the time of arrival: "The WLS start collecting stuff, collecting data, and shortly after, it identified the time of arrival." A551:25-A552:1 (emphasis added). Because the "actual start time" is earlier than the "time of arrival" and the "time of arrival" is admittedly earlier than the time the "frames were produced," the "actual start time" also is earlier than the time the "frames were produced." Thus, "actual start time" cannot literally satisfy the claim language either. Dr. Gottesman pointed to nothing else at trial.⁸

⁸ In addition to a failure of proof, Dr. Gottesman did not use the correct claim language in his infringement analysis of "actual start time." The claim requires a measurement of the time the frame was produced at each cell site. A127 at 15:59-61. Dr. Gottesman, however argues "actual start time" is the time the frame began to be produced at each cell site. A550:16-20 (emphasis added); *see also* A551. Thus, even if accepted by the jury, Dr.

No reasonable jury could determine the record supports a finding of literal infringement of claim 31. *Litton Sys.*, 140 F.3d at 1454 (“any deviation from the claim precludes a finding of literal infringement.”).

In sum, TP introduced no evidence at trial that Andrew’s products infringe each and every limitation of any asserted claim. Because no reasonable jury could conclude otherwise, this Court should set aside the jury’s verdict of infringement. In the event the Court does not grant judgment as a matter of law, a new trial is warranted because the jury verdict of infringement was clearly against the weight of the evidence.

D. No Reasonable Jury Could Find Willfulness By Clear And Convincing Evidence.

1. Legal Standard: *Seagate* Dictates Judgment For Andrew.

In *In re Seagate Tech., LLC*, the Federal Circuit unequivocally raised the bar for prevailing on a willfulness claim. 497 F.3d 1360 (Fed. Cir. 2007) (*en banc*); *see also Pannu v. Iolab Corp.*, 155 F.3d at 1348 (substantial evidence standard for JMOL). In *Seagate*, the Federal Circuit specifically overruled *Underwater Devices*⁹, eliminated the previous focus on the subjective intent of the alleged infringer, and “abandon[ed]” the duty of due care standard. *Id.* at 1371. Under *Seagate*, for TP to prove willful infringement, there must be substantial evidence in the record demonstrating by clear and convincing evidence that there was: (1) “an objectively high likelihood that [Andrew’s] actions constituted infringement of a valid patent”; and (2) “that this objectively-defined risk (determined by the record developed in the infringement proceeding) was either known or so obvious that it should have been known to [Andrew].” *Id.* The Court referred to the first prong as requiring “objective recklessness.” *Id.* Andrew’s mental

Gottesman’s testimony would not support a finding of literal infringement because his analysis is not based on the actual claim language.

⁹ *Underwater Devices, Inc. v. Morrison-Knudson, Co.*, 717 F.2d 1380 (Fed. Cir. 1983).

state is wholly irrelevant to this prong.¹⁰ Moreover, the “willfulness claim asserted in the original complaint must necessarily be grounded exclusively in [Andrew’s] pre-filing conduct.” *Id.* at 1374 (emphasis added).

2. Andrew Was Not Objectively Reckless.

a. The Documents Introduced At Trial Do Not Provide Substantial Evidence That Andrew Was Objectively Reckless.

TP’s willfulness evidence consisted largely of its “notice letters” (PTX 7 (A135-A137), PTX 8 (A138-A140), PTX 17 (A158-A162), and PTX18 (A163-A169)), and the Settlement Agreement (PTX 15R (A141-157)). No reasonable jury could conclude these documents demonstrate that Andrew willfully infringed the ‘144 patent.

i. PTX 7 and PTX 8.

PTX 7 is dated December 29, 2000. A135. TP admits that PTX 7 was sent before either party was selling any product (A440:21-A441:2), and certainly before Andrew had deployed product that could locate a phone on an SDCCH. A364:17-22. Thus, it was not related in any way to the acts currently accused of infringement. PTX 7 also simply lists the patent number and title, and does not: (a) make any reference to performing UTDOA in a GSM environment; (b) mention an SDCCH; nor (c) make any infringement allegations. *See* A135-137; A441:15-21.¹¹

Like PTX 7, PTX 8 was not related in any way to the acts accused of infringement here, and simply provided Andrew with notice of the ‘144 patent’s existence. *See* A138-A140. PTX 8 says even less than PTX 7 — by TP’s General Counsel’s own trial admission, it is simply a list

¹⁰ Likewise, any evidence TP introduced of Andrew’s alleged motive to infringe is irrelevant under *Seagate*. *See* A379:7-A383:19; A984:16-24. *See also Seagate*, 497 F.3d at 1370-74.

¹¹ Furthermore, PTX 7 actually “teaches away” from the currently-advanced interpretation that the ‘144 patent applies to an SDCCH in GSM — PTX 7 refers to the reverse control channel as a specific entity having the acronym “RCC.” *See* A135. It also “teaches away” from the current GSM security application, because it references E911, for which Andrew used (and still uses) the voice channel. A135-137; A364:13-22; A443:7-12.

of TP's patents that had issued as of 2002, which TP sent to Andrew "for informational purposes." A138; A426:9-12. PTX 8 makes no infringement allegations, does not describe the '144 patent, and gives absolutely no notice of TP's interpretation of the patent. A138; A441:22-A442:7.

ii. PTX 17 and 18.

PTX 17 is a letter dated September 30, 2005, and PTX 18 is a letter dated October 13, 2005. *See* A158-A159; A163-A166. Both letters were sent approximately ten months after Andrew bid on the STC contract, and more than a month after the demonstration that TP contends infringes the '144 patent. *See* A488:17-20; A526:7-12. The letters cannot be used to show an objective likelihood of infringement for TP's "offer for sale" and Ashburn demonstrations claims, because they were sent after the acts of which TP complains.

On their content, neither letter provides a basis for a reasonable jury to determine there was an objectively high risk of infringement. PTX 17 makes no attempt to explain how the myriad limitations of the '144 patent claims allegedly are met by Andrew's product — it contained no claim chart or infringement analysis whatsoever, except to say that "certain of the RFP's requirements contemplate use of cellular telephone location equipment to locate mobile telephones using reverse control channel signal data to implement TDOA (Time Difference of Arrival) location." A158. Similarly, PTX 18 simply referenced the STC RFP and repeated the claim language of claim 22 and its dependent claims, without even discussing the structure required to satisfy the claims' means-plus-function limitations. *See* A165-A166. Notably, four of the five claims TP asserted in this action were not listed in the claim chart; of the six claims listed in the chart, TP asserted only one in this action. *See id.*

iii. The Settlement Agreement.

The Settlement Agreement (PTX 15R) also does not provide a basis for a reasonable jury to determine there was substantial evidence of an objectively high likelihood of infringement. Not only did the Settlement Agreement concern a previous lawsuit in which TP had not asserted the '144 patent, but neither the STC network nor the current version of Andrew's product were at issue; indeed, Andrew was not even practicing UTDOA on an SDCCH at the time the Settlement Agreement was signed. *See generally* A141-A157; *see also* A423:6-15 ('144 patent not part of previous lawsuit, and Andrew did not need a license to the '144 because it was using the voice channel); A443:7-12. The only mention of the '144 patent was in Paragraphs 6 and 8, which defined the scope of rights granted under the Agreement, and neither those paragraphs — nor anything else in the Agreement — addressed whether or not the GSM SDCCH was ever alleged to be relevant to the '144 patent. *See* A144 at ¶¶ 6 and 8. Indeed, far from proving an objectively high likelihood of infringement, TP's silence regarding its belief that the '144 patent covered the SDCCH and the UTDOA ETSI standard then being developed is a basis for Andrew's equitable defenses.

Furthermore, the mere fact that the '144 patent was excluded from the Settlement Agreement's license grant does not constitute substantial evidence for a reasonable jury to determine a high likelihood of infringement because the Agreement does not give notice of TP's interpretation of the patent. *See* A141-A157. Indeed, TP's general counsel Fred Beckley admitted that the '144 patent was carved out of the Agreement because Andrew did not need a license to it. *See* A429:15-25; A423:6-15. Mr. Beckley also admitted that he was not aware of anyone from TP telling anyone from Andrew that TP interpreted '144 patent to cover UTDOA in GSM. A445:4-8.

The covenant not to sue is similarly uninformative — it does not give notice of TP’s interpretation of the patent, and only establishes what is protected by the covenant (domestic E911 networks, Andrew’s then existing wireless network system). *See* A144-A145 at ¶ 8; A145-A146 at ¶ 9. The covenant not to sue did not forbid anything. *Compare* A141-A157 with A430:1-8; with A250:5-6; and with A354:19-A355:6.

Finally, the mention of GSM and “control or access channel” in Paragraph 9 does not constitute substantial evidence for a reasonable jury to determine there was an objectively high likelihood of infringement because: (a) the Settlement Agreement did not use the term “SDCCH;” (b) the claims all require a “reverse control channel”; and (c) the only potential reverse control channel in GSM is the random access channel, not the SDCCH. *See* A146; A746:14-15; A747:1-2.

b. Andrew Presented Strong Defenses.

Andrew also presented strong non-infringement positions at trial for each asserted claim, and no reasonable jury could have found either infringement or that the ‘144 patent is enforceable against Andrew given TP’s conduct during the UTDOA standardization process. *See Seagate*, 497 F.3d at 1374 (“A substantial question about invalidity or infringement is likely sufficient not only to avoid a preliminary injunction, but also a charge of willfulness based on post-filing conduct.”); *Cohesive Techs., Inc. v. Waters Corp.*, C.A. Nos. 98-12308, 99-11528, 01-12307, 2007 WL 2746805, *17-19 (D. Mass. Aug. 31, 2007) (applying *Seagate*; no willfulness where, *inter alia*, conclusion of defendant’s scientist that defendant’s product did not meet claim limitation was reasonable).

First, as discussed above at pp. 13-40, there was not substantial evidence at trial supporting a finding of infringement, and no reasonable jury could have found infringement.

Second, no reasonable jury could not have found fraud and promissory estoppel on TP's part. Indeed, TP made promises to license any of its essential intellectual property — including the '144 patent — in the Feasibility Study and the Study Group's Ground Rules. *See* below at pp. 49-50. These promises were binding and not amorphous, were made to Andrew, and concerned the standardized technology and the parties' joint venture. *See* pp. 50-54. Moreover, TP intended to induce Andrew's action and inaction (*see* pp. 54-55), Andrew relied (*see* pp. 55-58), and Andrew was injured (*see* p. 58). In addition, substantial evidence showed that TP committed fraud because: (a) it misrepresented and omitted a material fact by concealing its view of UTDOA as proprietary technology and failing to declare the '144 patent to ETSI (*see* pp. 59-62); (b) it did this knowingly or with reckless disregard for the truth, (*see* pp. 62-63); (c) it intended to mislead (*see* p. 63); (d) Andrew reasonably relied (*see* pp. 63-65); and (e) Andrew was damaged (*see* p. 65).

Moreover, for the reasons set out in Andrew's post-trial motions on equitable estoppel, implied license and unclean hands (filed concurrently) — which were not considered by the jury — the '144 patent should be held unenforceable. Indeed, recognizing a legitimate issue of material fact on these issues, the Court denied TP's motion for summary judgment on Andrew's counterclaims and affirmative defenses (*see* D.I. 138; D.I. 258), and noted at the summary judgment hearing that TP was “not being completely honest” during the UTDOA standardization process. A235:9-10; *see generally* A233-A236.

Accordingly, TP's willfulness proof falls far short of *Seagate*'s standard of objective recklessness because these substantial questions are “sufficient not only to avoid a preliminary injunction, but also a charge of willfulness based on post-filing conduct.” *Seagate*, 497 F.3d at 1374.

3. TP's Failure To Move For A Preliminary Injunction Shows That Andrew's Post-Filing Conduct Was Not Objectively Reckless.

The Federal Circuit expressly stated in *Seagate* that it can be deduced that a defendant's alleged post-filing infringement did not rise to the level of objective recklessness where, as here, a plaintiff did not move for a preliminary injunction:

[W]hen an accused infringer's post-filing conduct is reckless, a patentee can move for a preliminary injunction, which generally provides an adequate remedy for combating post-filing willful infringement. A patentee who does not attempt to stop an accused infringer's activities in this manner should not be allowed to accrue enhanced damages based solely on the infringer's post-filing conduct.

Seagate, 497 F.3d at 1374. Here, TP did not move for a preliminary injunction, which shows that any post-suit infringement was not objectively reckless. Thus, any argument by TP that Andrew's post-suit infringement was willful because it signed the STC contract after the complaint was filed is irrelevant as a matter of law. A505:13-20; A987:2-7.¹²

4. No Reasonable Jury Could Conclude That Andrew Knew Or Should Have Known Of A High Likelihood Of Infringement.

As discussed above, because no reasonable jury could conclude that Andrew was objectively reckless, Andrew respectfully requests that the Court grant judgment as a matter of law on this threshold issue. To the extent the Court considers the second *Seagate* prong — whether Andrew knew or should have known that there was a high likelihood that its actions constituted infringement of a valid patent — it is a second independent basis for judgment as a matter of law in Andrew's favor. Indeed, the discussion above in Section D.2 demonstrates there

¹² Although not set out specifically in *Seagate* as a factor to be considered, TP's litigation conduct — like its failure to move for a preliminary injunction — also illustrates the lack of an objectively high likelihood of infringement. First, TP did not move for summary judgment of noninfringement, which shows that TP itself believed there was at least an issue of material fact as to whether Andrew's actions constituted infringement of the '144 patent. Second, TP dropped infringement allegations for 2 of the 5 claims it had previously asserted in the case.

is no substantial evidence that Andrew knew or should have known of a high likelihood of infringement.

First, as discussed above at pp. 41-44, PTX 7, PTX 8 and the Settlement Agreement were not related in any way to the acts accused of infringement in this case. None of these documents makes any reference to the ‘144 patent’s alleged relevance to performing UTDOA in a GSM environment using an SDCCH. *See* PTX 7 (A135-A137); PTX 8 (A138-A140); PTX 15R (A141-A157). Indeed, PTX 7 “teaches away” because it concerns E911, for which Andrew uses the voice channel, PTX 8 is literally a list of all TP patents that had issued as of 2002, and no one told Andrew of TP’s interpretation of the ‘144 patent, even when the Settlement Agreement was negotiated. *See* PTX 7 (A135-A137); PTX 8 (A138-A140); A426:9-12; A441:22-A442:7, A445:4-8.

Second, as discussed above at pp. 42, PTX 17 and PTX 18 were sent after Andrew performed two of the three acts accused of infringement and are too cursory for a reasonable jury to conclude they put Andrew on notice of an objectively high likelihood of infringement. Indeed, PTX 17 makes no specific infringement allegations whatsoever, and the claim chart attached to PTX 18 simply referenced the STC RFP and repeated the claim language for each limitation. *See* PTX 17 (A158-A162); PTX 18 (A163-A166). Notably, four of the five claims TP originally asserted in this action were not listed in the claim chart, and of the six claims listed in the chart, only one was asserted in this action. A163 and A165-A166.

a. Andrew Analyzed the Patent and Had Strong Arguments.

Further illustrating that Andrew did not know – and should not have known – of an objectively high likelihood of infringement, is Andrew’s analysis of the ‘144 patent, its strong noninfringement arguments, and its strong cases for fraud, promissory estoppel, equitable estoppel, unclean hands and implied license. *See, e.g.*, A981:18-23; *Seagate*, 497 F.3d at 1374

(“A substantial question about invalidity or infringement is likely sufficient not only to avoid a preliminary injunction, but also a charge of willfulness based on post-filing conduct.”); *Cohesive Techs.*, 2007 WL 2746805, *17-19 (applying *Seagate*; no willfulness where, *inter alia*, conclusion of defendant’s scientist that defendant’s product did not meet claim limitation was reasonable). *See also* discussions above and below at Sections IV(C), IV(E), IV(F).

b. Andrew Did Not Copy TP’s Product.

Andrew also did its own research and development, and developed its Geometrix product over many years, spending over \$25 million. A938; *see also* A691:21-A692:1 (TP and Andrew have different product offerings); A933:21-A934:3 (Andrew does own research and development and has many patents related to geolocation). Indeed, use of the SDCCH is specified by the ETSI standard, which Andrew and TP jointly proposed and developed. These facts weigh against a finding of willfulness. *See Cohesive Techs.*, 2007 WL 2746805, *17 (applying *Seagate*; finding no willfulness and noting that “Waters did not copy the column it obtained from Cohesive through Glaxo-Wellcome.”).

In sum, based on the evidence of record, no reasonable jury could determine that TP proved willful infringement by clear and convincing evidence. In the event the Court does not grant judgment as a matter of law, a new trial is warranted because the jury verdict was clearly against the weight of the evidence.

E. The Court Should Grant Judgment As A Matter Of Law That TP Is Promissorily Estopped From Asserting The ‘144 Patent Against Andrew.

The overwhelming weight of the evidence supports a judgment as a matter of law that TP is promissorily estopped from asserting the ‘144 patent against Andrew. *See Gatenby v. Altoona Aviation Corp.*, 407 F.2d 443, 446 (3rd Cir. 1968). This is a classic case of promissory estoppel: TP first promised to offer licenses to any essential intellectual property if UTDOA was

standardized, solicited Andrew to assist in the process, but then turned the tables, suing Andrew as soon as Andrew tried to actually sell products implementing the UTDOA standard.

Under Delaware law, to prove promissory estoppel Andrew must show: “(i) a promise was made; (ii) it was the reasonable expectation of the promisor to induce action or forbearance on the part of the promisee; (iii) the promisee reasonably relied on the promise and took action to his detriment; and (iv) such promise is binding because injustice can be avoided only by enforcement of the promise.” *Lord v. Souder*, 748 A.2d 393, 399 (Del. 2000). It is appropriate for the Court to consider the “avoidance of injustice element” as a matter of law since it “is, [] a legal concept and not a question of fact to be submitted to the jury.” *Chrysler Corp. (Delaware) v. Chaplake Holdings, Ltd.*, 822 A.2d 1024, 1033 (Del. 2003).

Here, the undisputed evidence demonstrates that TP made a “series of promises,” both oral and written, to license any patents it interpreted as necessary to practice the UTDOA standard. *See Chrysler Corp.*, 822 A.2d at 1033. All relevant evidence demonstrates that Andrew reasonably relied on TP’s “representations and related conduct.” *Ramone v. Lang*, C.A. No. 1592, 2006 WL 905347, *15 (Del. Ch. Apr. 3, 2006) (finding promissory estoppel). No reasonable jury could find otherwise.

1. TP Made Not One, But Three Promises.

TP unequivocally made three separate promises to license any of its intellectual property – including the ‘144 patent – essential to the standardization of UTDOA: (a) in the Feasibility Study; (b) in the Study Group’s Ground Rules; and (c) in its ETSI membership. A reasonable jury “could not differ in the inference to be drawn from the testimony” that a promise was made. *Jopek v. New York Cent. R. Co.*, 778 F.2d 778, 784 (3d Cir. 1965).

a. The Feasibility Study.

To convince the standards body that UTDOA was worth pursuing, TP submitted the Feasibility Study. It stated: “TruePosition, Incorporated may hold one or more patents or copyrights that cover information contained in this document. A license will be made available to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.” A223 at 3.3.5. This language was “basically a stated promise” to license essential patents related to standardization, which includes the ‘144 patent as interpreted by TP. *See* A865:13-A867:17. TP admitted it made this “promise about licensing on reasonable nondiscriminatory terms.” A344:25-A345:2; A295:15-21. TP’s trial counsel stated the Feasibility Study “arguably was a promise,” and the transcript reflects no contrary argument. A1000:6-14; *see also* A1002:3 (TP counsel discussing “the feasibility study promise”); A1001:1-3 (same).

b. The Feasibility Study Promise Was Binding And Not Amorphous.

TP’s “assurances” to ETSI and the industry “cannot be construed as amorphous” and are sufficient to constitute a promise. *Lord*, 748 A.2d at 399 (finding sufficient allegations for promissory estoppel in employment context). Like the employee in *Lord*, who received “assurances that if she disclosed such information, she would be protected from any reprisals,” the industry had concern about TP, and so TP provided “assurances” that it would grant fair and reasonable licenses. *Id.*; *see also Chrysler Corp.*, 822 A.2d at 1034 (*Lord* elements “appl[y] to all promissory estoppel claims, not merely those cases dealing with employment matters”).

c. The Feasibility Study Promise Concerns The Standardized Technology.

This promise covered the technology that was eventually standardized, including the ‘144 patent under TP’s interpretation. As TP’s CTO Rob Anderson testified, the promise of a license “would apply to any of TP’s patents that it had at the time of this document” and “would include

the patent in this case, the ‘144.” A405:17-24. The Feasibility Study stated “this re-introduced capability should be designated U-TDOA... the energy associated with call setup signaling activity on the SDCCH can be used to locate an idle MS.” A220. What TP was “proposing to ETSI was to do U-TDOA on the SDCCH channel in this feasibility study,” and “specifically called out [the SDCCH] as an alternative.” A404:13-20.

d. The Feasibility Study Promise Was Made To Andrew.

The promise of the Feasibility Study was “presented to all of the members of 3GPPP” “at a meeting in Seattle.” A262:11-15; A259:14-23. “[T]hese documents are typically put on a document server well in advance of these meetings that all of the members have access to.” A262:11-15. The Feasibility Study was “not at all” a secret but an “open document” provided to “the whole group.” A263:3-4; A275:25-A276:1; A296:13-14. In fact, the document “is still there” “and you can still obtain it” on the 3GPP website. A872:5-10. TP’s only response at trial was that Andrew was not “a member of the standards group at that time” that the Feasibility Study was published.” A345:18-21; *see also* A346:12-16. But the promise was made to ETSI, which Andrew joined, and was not revoked. It was unnecessary to repeat the promise because “as soon as [TP] joined ETSI, it was everybody’s understanding that their technology would be available to everybody as part of the standard.” A925:16-20.

The promise of a license in the Feasibility Study “was much more than enough” for Andrew to rely upon, since it “was never revoked.” A925:21-A926:2. In fact, under law, the promise was no longer revocable once a member of ETSI, including Andrew “put itself into a legal position from which it cannot be expected to extricate itself without substantial injury.” *Danby v. Osteopathic Hospital Ass’n of Del.*, 34 Del.Ch. 427, 435 (Del. 1954) (finding promise was not revocable once charity started planning based on promise to donate). The only available

inference is that TP kept up the pretense of a “multi-vendor” system right up to the moment a second vendor tried to implement the standard. *See* A91-A93.

2. The Study Group’s Ground Rules.

The second promise is found in TP’s promise to adhere to the ETSI Study Group’s Ground Rules. The “Study Group” included competing wireless operators, cellular network infrastructure providers, and the two geolocation providers — TP and Andrew. A373:12-21; *see also* A327:14-A328:14; A24; A28. The Study Group’s goal was to “jointly work on getting TDOA architecture, functionality, interfaces into the GSM standard.” A457:6-10.

The Ground Rules were published to “describe[] the work” that would result from the Study Group. A455:23-25; A456:2-5; A456:9-11. These Ground Rules were set up in spite of, and perhaps because of, the fact that the participants “all come from different companies that to some extent are competitors.” A81. The Study Group “was a collection of engineers and standards people, and their goal was to work collaboratively to make a technical solution. They didn’t want to have legal skirmishes between the companies.” A330:16-19. Indeed, the Ground Rules stated that the work was to benefit each member of the Group:

PROJECT GROUND RULES.

In order to focus on the result and to simplify the teamwork we have agreed on the following ground rules for the system study project. That means we have all agreed to live by these rules and honor them...

We understand that we all come from different companies that to some extent are competitors and to some extent are customers and suppliers. We all work with the understanding that what we do here is to create a solution that we all benefit from.

A81 (emphasis added).

a. The Study Group Promise Was Binding.

By joining the Study Group, TP was bound by the Ground Rules just like every other member. A80. By agreeing to the Ground Rules, the members promised each other they would abide by them. *See* REST 2d CONTR § 1 (2007) (“A contract is a promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty.”); WILLSTN-CN § 1:1 (2007); *Meurer Steel Barrel Co v. Martin*, 1 F.2d 687, 687 (3d Cir. 1924) (in a contract containing mutual executory promises “both parties are bound by reciprocal obligations and the promise of one is the consideration for the promise of the other”). TP argued that the Study Group’s “joint venture” is “quite different than a partnership.” A456:7-8. But the issue is not corporate entity formation between the parties; rather whether the sum of TP’s actions constituted a reliable promise to Andrew. *See Ramone*, 2006 WL 905347 at *15. Here, Andrew reasonably relied that TP would abide by the Ground Rules.

3. TP’s ETSI Membership.

The third binding promise TP made to license the ‘144 patent arises from TP’s ETSI membership. A11-A16. By entering into a legal agreement with ETSI, TP promised to comply with ETSI’s IPR Policy. A210-A216. It is uncontested that the ETSI policy “bound” TP. A70. The ETSI Rules clearly require declaration of any patent essential to implementing an option of a standard, and ETSI members promise to offer fair licenses to such patents. *See* Section IV(F)(1).

At trial, TP offered no theory why the Feasibility Study, Ground Rules, or ETSI membership could be interpreted as anything other than promises and, indeed, TP’s counsel repeatedly referred to them throughout the trial as “the promises.” A998:20-A999:1 (Ground Rules was a promise); A1000:6-14 (Feasibility Study was “the other promise” and “was arguably a promise”); A1002:2-4 (same); A1001:1-3 (referring to both as promises). Since “[r]easonable

minds could not differ in the inference to be drawn from the testimony,” judgment as a matter of law is appropriate. *See Jopek*, 353 F.2d at 784 (affirming grant of JMOL).

4. TP Intended To Induce Andrew’s Action Or Inaction Based On The Promises.

TP intended to lull the Study Group, the ETSI membership, and Andrew specifically, into a false sense of security by promising it had no essential patents. This is shown by the purpose of the Feasibility Study, TP’s repeated assurances, and TP’s need for UTDOA to be seen as a multi-vendor technology.

First, as shown above, in order to get UTDOA standardized TP promised to play both by ETSI’s rules, via its ETSI membership, the Feasibility Study, and the Study Group’s Ground Rules. *See* A91-A92; A223 at 3.3.5; A81. TP internally agreed that the Feasibility Study was intended to “turn the skeptical interest into broader support” for UTDOA and “address the concerns of the GERAN members” that UTDOA was not a “Multi-vendor” system. A91-A92.

TP did not stop with the Feasibility Study and Ground Rules — TP even followed up with individual assurances to ETSI members. For example, TP’s standards representative forwarded an email titled “No Essential IPR in TruePosition’s U-TDOA Proposal,” asking President Joe Sheehan whether he should send the materials to additional AT&T executives to maintain “forward momentum.” A70. TP admitted these statements were intended to give “comfort that TruePosition’s patents were not going to be blocking to the standard.” A312:15-18. TP’s standards representative told TP executives both that TP needed the help of other UTDOA vendors, and that TP would also need to license its patents. A92.

On January 9, 2003, TP’s standards representative Rhys Robinson told President Joe Sheehan and another executive (Patrick Leihy) that “it will help our cause in getting U-TDOA standardized if we report that we are collaborating with Grayson (Because then the major

infrastructure vendors will believe that U-TDOA is NOT a proprietary solution).” A52 (emphasis in original); *see also* A324:7-20 (Sheehan acknowledging receipt). Sheehan even admitted that “multi-vendor was important and that was something that we had known for a long time.” A306:19-20. In addition, another employee (Kevin Donaghy), suggested that Grayson, Andrew’s predecessor, should be contractually obligated to promote UTDOA with TP:

You might want to consider adding a term to the Grayson license agreement that has Grayson joining the 3GPP and actively promoting/contributing to the standardization of U-TDOA.... it will eliminate the perception/concern that U-TDOA is a proprietary technology.... Operators such as AWS would view Grayson’s standards participation positively.

A2; A5 (basis for both email chains). TP’s President, Joe Sheehan, and its general counsel, Fred Beckley, responded it was a “good idea.” *See* A2 and A4; A456:5-A458:24; A314:10-A321:14. And to show that “[m]ore than one person can make” the standardized technology, TP turned to its only competitor in the two-vendor marketplace — Andrew. A303:9-16; *see* A367:15-17. TP knew what it was doing, and the above trail of emails indisputably documents that knowledge.

5. Andrew Reasonably Relied On TP’s Promises.

Shortly after TP decided it would be a “good idea” to collaborate with Andrew for the sake of appearances, Andrew joined ETSI. *See* A45-A51 (Andrew’s ETSI application). Andrew relied upon TP’s promises as they worked towards standardization, which constitutes “actual reliance” of “the sort to have been reasonably expected” as a progression of TP’s strategizing. *Ramone*, 2006 WL 905347 at *16 (finding reasonable reliance).

The record is replete with evidence of Andrew’s reliance. Andrew knew that standards members “want to have companies that are working on the same technology to work on the same standard,” to avoid “just one company representing a technology that only that company can offer.” A894:7-18. Andrew’s standards representative, Oskar Magnusson, read TP’s Feasibility

Study, understanding that it was “basically a stated promise” that a license would be made available to any patents that TP interpreted as covering UTDOA. A865:13-A867:8. Magnusson told his bosses, the VPs of Engineering and Business Development, of the promise TP made in the Feasibility Study to license any essential IPRs. A867:23-A868:21. Based on this, Terry Garner, Andrew’s Network Solution’s Group President, authorized participation in ETSI for UTDOA Standardization. A941:17-22. Garner thought Andrew would “benefit from the effort that we put forth in the standards work,” and testified that “no way would I have committed resources for this effort if we weren’t going to be able to take advantage of the standard work.” A941:24-A942:7. Hence, Andrew joined ETSI and the UTDOA Study Group. A45-A51; A876:10-12; A877:15-25.¹³

Furthermore, TP’s witnesses testified that UTDOA was standardized as a result of proposals Andrew and TP jointly submitted.¹⁴ TP’s General Counsel Fred Beckley testified that Andrew and TP co-signed submissions to ETSI. A453:24-A454:1. CTO Rob Anderson concurred. A412:21-A413:10. Even President Joe Sheehan testified to the “exchang[e] [of] ideas and comments and strategy prior to the meetings and at the meetings” and that it was this joint effort of the two companies that led to the acceptance of UTDOA into the standard. A332:1-A333:10.

Andrew’s reliance was extensive and ongoing. For almost two years, as the parties jointly worked towards standardization, TP gave Andrew “no indication that there were any

¹³ TP’s promise to the industry did not need to be made “more than once,” and was “never revoked” by TP. A925:13-A926:2. Indeed, Andrew’s reliance by assuming legal obligations under ETSI made it no longer revocable. *See Danby*, 34 Del.Ch. at 435. *See* above p. 51.

¹⁴ In fact, TP’s reinforcing conduct over these years may comprise an independent, *fourth* promise to Andrew that it would not sue Andrew for practicing the UTDOA standard. *See Ramone v. Lang*, 2006 WL 905347, *15 (Del. Ch. Apr. 3, 2006); *Keating v. Board of Educ. of Appoquinimink School Dist.*, C.A. No. 12589, 1993 WL 460527 (Del. Ch. Nov. 3, 1993).

problems toward developing the standards.” A942:14-16. TP “conducted [itself] towards [Andrew] in a manner that led [Andrew] to be trusting.” *Ramone*, 2006 WL 905347 at *15. For two years, Andrew and TP “worked together to build a standard,” and their standards representatives traveled together, attended meetings, went to dinner, talked strategy, and met separately before the meetings to “unify their strategy.” A409:18-A410:22. The results were a host of “change requests,” or “CRs,” jointly submitted by Andrew and TP, proposing to add UTDOA into the standard. A860:11-25; A884:17-A888-21. Jointly, they worked to “build a consensus” on the CRs to the standard body. A888:7.

Furthermore, this cooperation occurred *because* Andrew and TP are competitors, not in spite of it. The un rebutted testimony is “it was important that Andrew and TruePosition were competitors out in the marketplace” because ETSI was more receptive to standards proposed by market competitors — what TP called a “Multi-vendor” system.¹⁵ *See* A894:19-21; A91-A93.

As a result of Andrew’s collaboration with TP, UTDOA was standardized for the GSM network. *See* A44 at 4.2 (the standard); A9 (TP email announcing success in standardization); A333:7-10 (“And this joint effort of Andrew and TruePosition was, in fact, successful in November 2004. UTDOA was accepted by the entire industry worldwide for GSM and GPRS.”). The standard “specifically called out this same SDCCH as one of the options for UTDOA, just like [TP] proposed in this April 2002 document” — the Feasibility Study. A405:25-A406:4. Successful in its standardization partnership, Andrew then bid on the STC RFP. *See* A947:12-16.

¹⁵ TP also admits companies “can be competing in the marketplace today and also today they could be working jointly on another project” or “in litigation on one issue today, but also today be working on a joint venture or partnership or joint effort on something else.” A452:23-A453:14.

6. Andrew Was Injured From Its Reliance

Andrew's injury is self-evident by this lawsuit; indeed, TP does not contest this element of promissory estoppel. TP sought lost profits of \$45.3 million, an injunction, and enhanced damages. D.I. 292; D.I. 316; D.I. 314. "Further, TruePosition does not intend to grant a license to Andrew or any third-party vendor with respect to fulfillment of the RFP."¹⁶ A158; *see also* A338:21-A340:3 (no license has been granted).

Because no reasonable jury could conclude otherwise, this Court should set aside the jury's verdict of no promissory estoppel. In the event the Court does not grant judgment as a matter of law, a new trial is warranted because the jury verdict was clearly against the weight of the evidence.

F. The Court Should Grant Judgment As A Matter of Law That TP Committed Fraud.

The overwhelming weight of the evidence supports a finding that TP's representations to Andrew constituted fraud. The elements of fraud are: "(a) A misrepresentation or omission of a material fact; (b) The misrepresentation or omission was made knowingly or with a reckless disregard for the truth; (c) The misrepresentation or omission was made with the intent to mislead; (d) Reasonable reliance on the misrepresentation or omission; and (e) Damage as a result of reliance on the misrepresentation or omission." *See Lazar v. Superior Ct.*, 909 P.2d 981, 984-985 (Cal. 1996). TP intentionally and knowingly misrepresented facts to ETSI's membership when it did not declare the '144 patent, and Andrew reasonably relied upon such misrepresentations. No reasonable jury could have found otherwise.

¹⁶ TP also has interfered with Andrew's now-customer, STC, by giving its Saudi Arabian consultant "questions which can be asked of STC/Ericsson/Andrew to establish that the Andrew offer is infringing on the '144 patent." *See* A1.

1. TP Misrepresented And Omitted A Material Fact.

TP's failure to declare the '144 patent to ETSI constituted fraudulent misrepresentation. TP misrepresented its patent portfolio to ETSI when it did not declare the '144 patent during the standardization process. Under the IPR Policy, TP had a duty to declare essential IPR:

Each MEMBER shall use its reasonable endeavours to timely inform ETSI of ESSENTIAL IPRs it becomes aware of. In particular, a MEMBER submitting a technical proposal for a STANDARD or a TECHNICAL SPECIFICATION shall, on a bona fide basis, draw the attention of ETSI to any of that MEMBER's IPR which might be ESSENTIAL if that proposal is adopted.

A210 at 4.1 (capitalization in original). An IPR is "essential" if it is necessary to implement the standard under the normal state of the art — exactly what TP contends about the '144 patent:

Section 6. "ESSENTIAL" as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR.

A215 at 15.6. The reason why "essential IPR" must be declared is that upon declaration, the owner is requested to state in writing "that it is prepared to grant irrevocable licenses on fair, reasonable, and non-discriminatory terms and conditions" (A211 at 6.1) or come clean and tell ETSI that it is unwilling to license its essential IP. A212 at 8.1.

All reasonable interpretations of the ETSI IPR Policy require disclosure of the '144 patent. After joining ETSI in 2002, TP remained an active member up to and including the standardization of UTD OA in late 2004. *See* A11-A16; A309:13-15. Under ETSI's umbrella, TP solicited Andrew's support to standardize UTD OA for Location Services in GSM/GPRS, and those efforts were ultimately successful in changing a host of technical specifications. *See, e.g.* A226 at 4.2. The new "Release 6" specifications contain the first introductions of UTD OA to the ETSI standards. *See id.*; A89 at 4.2. Starting in Release 6, the GSM specification has stated, "[t]he U-TDOA positioning method is based on network measurements of the Time of Arrival

(TOA) of a known signal sent from the mobile and received at three or more LMUs. The known signal is the normal bursts generated by a mobile while in the dedicated mode; either on the SDCCH or TCH.” A226 at 4.2.4.

TP testified that in its view the ‘144 patent is essential to practice UTDOA over the SDCCH: “[I]t is ... TruePosition’s position, that the ‘144 is essential to that option in the standard.” A289:7-11; *see also* A335:21-24; A277:23-A278:1. Upon learning Andrew was also bidding on the STC contract that implements the standard, TP directed its Saudi consultant to “ask” STC about the bid, stating “[b]asically, if they (Andrew) provide TDOA and/or AOA location when the mobile subscriber is not engaged in a voice call (therefore on the control channel), they are infringing on the ‘144 patent owned by TruePosition.” A1. This was “exactly what is in the 3GPP and ETSI standard for U-TDOA on the SDCCH channel.” A416:11-25.

TP omitted any declaration of the ‘144 patent and misrepresented that it held no essential IPR. It is uncontested that TP “did not declare [the ‘144 patent] as essential to the standard.” A451:18-A452:3. Nor did anyone at TP tell “Andrew that TruePosition believed the ‘144 patent covered UTDOA in GSM using the SDCCH channel.” A444:9-A445:8. In fact, when Andrew’s standards representative told its TP partner, “I’m assuming there are no TruePosition IPs related to the suggested” technology, TP’s standard’s representative emailed back: “I don’t believe there are but I didn’t put the lawyer hat on when I put that together. I think it’s at a sufficiently high level to avoid that issue.” A7; *see also* A2694:25-A2695:10 (stating that the email covers GSM UTDOA). This misrepresentation was not just made to Andrew — TP also told AT&T that TP was “bound” by ETSI’s IPR policy, and that there were “no essential IPRs in TruePosition’s UTDOA proposal.” A1013; A70.¹⁷

¹⁷ Note that even if TP were not legally “bound,” as a matter of law, a claim for fraud “does not depend upon whether the defendant’s promise is ultimately enforceable as a contract.” *Lazar*, 12 Cal. 4th at 638.

2. TP's "Option Defense" Flies In the Face Of The IPR Policy.

TP argued at trial that the IPR Policy does not apply to options.¹⁸ See A418:10-15; A278:15-A279:11; A362:1-A363:16; A995:15-A996:6. TP's "option defense" is unavailing because the language of ETSI's intellectual property rights ("IPR") policy is unequivocal; patents required to perform the standard are "essential," even if they apply only to one of several options to implement the standard. In short, all patents that cover options in the standard are "essential" and must be declared:

Section 15.11. "STANDARD" shall mean any standard adopted by ETSI including options therein or amended versions...

Section 15.12. "TECHNICAL SPECIFICATION" shall mean any Technical Specification (TS) adopted by ETSI including options therein...

A215-A216 at 15.11-15.12 (emphasis added).

Even drawing every available inference in TP's favor, it is impossible to infer from the language of the ETSI Policy that options are excluded. See *Jopek*, 353 F.2d at 784 ("the legal effect of evidence is a question of law"); *Gatenby*, 407 F.2d at 446 (affirming grant of JMOL).

3. TP's Other Arguments Are Similarly Unavailing.

A reasonable jury could not determine TP's other defenses excused its conduct. Throughout trial, TP tried to detract attention from the issue by stating that the '144 patent was publicly available (See A244:15-20; A990:12-19), that Andrew was aware of the '144 patent from prior litigation (See A423:22-A424:4), or referencing the Settlement Agreement (See A354:23-A355:6; A428:11-A429:25). But nothing made Andrew (or ETSI) aware of TP's interpretation that the patent covered the standard or that TP was unwilling to license it. Nor

¹⁸ TP's misinterpretation of the actual ETSI policy creates an additional basis for a new trial since Andrew was unable to present Dr Rosenbrock, the Director General of ETSI at trial to testify as to the ETSI rules. Given TP's arguments at trial, Dr. Rosenbrock's testimony may be critical to a fair trial of the ETSI policy.

does knowing of a patent signal TP's intent to assert the '144 patent against standardized technology.

Further, TP's assertion that no one "from ETSI ever called to tell [TP] that [TP] did something wrong" or took "action against TruePosition" is absurd - it was not ETSI practice to ask companies about specific patents. *See* A257:22-A258:10; A272:15-23. That is the obligation of the members of ETSI, as the IPR policy makes clear. *See* A210-A216. The relevant inquiry is the ETSI Policy, and that language unequivocally establishes a duty to declare a patent TP planned to assert against implementations of the standard.

4. TP Made This Misrepresentation Or Omission Knowingly Or With Reckless Disregard For The Truth.

TP was well aware of its obligations when it mislead Andrew and other ETSI members. "Delaware law and the law of most other jurisdictions that the scienter or requirement can be satisfied by a showing of recklessness." *Lord*, 748 A.2d at 402. Even when making the decision not to declare, President Joe Sheehan was "aware" of "the ETSI IPR or patent disclosure rules" when "TruePosition made an affirmative decision not to declare the '144 patent to ETSI after considering whether to do that." A288:8-20. TP's Feasibility Study stated that "a license would be made available" for any essential intellectual property. A223 at 3.3.5. TP's own standards manager, Rhys Robinson, urged by email and in person to have TP patents declared as essential. *See* DTX 1065 (A94-A96); DTX 1066 (A97-A99); DTX 1069 (A100). Robinson continuously reminded TP's General Counsel he "would like to declare" the '144 patent, and was continually rebuffed. A94; *see* A97-A99. Robinson then told each of TP's President, CTO, and general counsel, "[i]f we wait until after the work item is approved to declare this IPR, we risk being categorized as playing 'The IPR shell-game.'" A100. Each piece of evidence demonstrates that TP had "no reasonable ground for believing" it did not have to declare the '144 patent if it

interpreted it as covering the standards it put forth. *Gagne v. Bertran*, 43 Cal.2d 481, 487-488 (Cal. 1954). But worse, these omissions and misrepresentations were *intentionally* calculated to get Andrew to help engineer its own shut-out of foreign markets.

5. TP Made The Misrepresentation Or Omission With The Intent To Mislead.

Standardization would be impossible unless UTDOA was perceived as “Multi-vendor.” A91-A92. Because Andrew was the only other UTDOA vendor, TP’s President and its general counsel thought it would be a “good idea” if Andrew’s predecessor, Grayson Wireless, was contractually obligated to join ETSI to eliminate the “perception/concern” that UTDOA was “proprietary” to TP. *See* A2; A4-5. Two months later, Rhys Robinson again directly reminded TP’s President that “**it will help our cause in getting U-TDOA standardized** if we report that we are collaborating with Grayson.” A52 (emphasis in original). TP’s statements “can plausibly be viewed as reflecting” TP’s “intent to induce” participation in the standardization process by misrepresenting its intention to assert its patent portfolio. *Engalla v. Permanente Medical Group, Inc.*, 15 Cal.4th 951, 976 (Cal. 1997) (reversing appellate court and affirming district court’s finding of fraud when insurance company misrepresented expediency of arbitration process to solicit participation).

6. Andrew Reasonably Relied On The Misrepresentation And Omission.

Throughout the trial, TP did not deny that its actions, including the Feasibility Study, the Study Group participation, and direct partnership with Andrew, were “a substantial factor in inducing [Andrew] to act,” constituting justifiable reliance for a claim of fraud. *In re First Alliance Mortg. Co.*, 471 F.3d 977, 992 (9th Cir. 2006) (citation omitted). TP’s actions “need not be the sole cause of damage” to Andrew. *Id.* But “a presumption, or at least an inference, of reliance arises wherever there is a showing that a misrepresentation was material.” *Engalla*, 15

Cal.4th at 977. A presumption of reliance in this instance is appropriate since “a reasonable man would attach importance to its existence or nonexistence in determining his choice of action in the transaction in question,” and there is insufficient evidence that a reasonable man would have acted any differently than Andrew did. *Id.* (quotation omitted).

First, Andrew reasonably relied on the Feasibility Study. *See* pp. 49-52; 55-58 above. Having read TP’s Feasibility Study, Andrew’s standards representative thought it was “there in black and white,” because “it basically stated a promise, but,... it’s in a way redundant because it was, according to my understanding of standards, the patents were to be shared anyway.” A867:11-17. It was also reasonable for Andrew to expect its fellow ETSI member would comply with the IPR Policy and offer fair and reasonable licenses to patents necessary to practice standardized technology. Moreover, the ETSI IPR Policy “is read at the beginning of each and every plenary meeting,” “at all the meetings” that Andrew representatives attended. A914:9-18. ETSI members must notify the ETSI Director General of essential IPRs. A913:6-10. “[T]here is insufficient evidence for permitting any different finding” than that Andrew could assume TP would follow the rules. *See Gatenby*, 407 F.2d at 446.

Second, it was reasonable for Andrew to expect TP to follow the Study Group rules. Members “all agreed to live by” “Ground Rules” to “create a solution that we all benefit from,” even “competitors.” A71-A82; A327:14-A328:14. This Study Group policy “tried to create an environment of openness” necessary for the standardization process to succeed. A879:11-13.

Third, TP explicitly told Andrew it held no “TruePosition IPs related” to UTDOA on the UMTS System. A7. It is undisputed that the same technology also applied to performance of UTDOA in a GSM system, over the SDCCH or “control channel.” A928:25-A929:10.

In a two-supplier market, it would be economically irrational for Andrew to help its competitor TP and work together without expectation of economic reward. Andrew's Division President would not have approved the partnership if they wouldn't "be able to take advantage of the standard work" because Andrew had no interest in putting itself at a "competitive disadvantage." A941:20-A942:7; A882:14-22. It is undisputed that Andrew "would not, in all reasonable probability, have entered into" standardization save for TP's misrepresentations and nondisclosures, making judgment as a matter of law wholly appropriate. *Manderville v. PCG & S Group, Inc.*, 146 Cal. App. 4th 1486, 1498-1499 (Cal. Ct. App. 2007) ("[W]hether a party's reliance was justified may be decided as a matter of law if reasonable minds can come to only one conclusion based on the facts.") (citation omitted).

7. Andrew Was Damaged By Relying On TP's Misrepresentations And Omissions.

TP's misrepresentations to Andrew, constituting fraud, resulted in this very lawsuit, a judgment of \$45.3 million against it, and challenges to Andrew's business relationships. As with promissory estoppel, the harm TP caused is self-evident. Because no reasonable jury could conclude otherwise, this Court should set aside the jury's verdict of no fraud. In the event the Court does not grant judgment as a matter of law, a new trial is warranted because the jury verdict was clearly against the weight of the evidence.

G. No Reasonable Jury Could Have Awarded TP \$45.3 Million In Lost Profits Damages.

The damages verdict awarded to TP cannot be sustained under the proper JMOL standard. The law is clear that lost profits damages cannot be awarded if there are acceptable non-infringing alternatives available or if the damages amount rests on speculation and unsupported assumptions. Here, \$45.3 million was awarded even though (i) acceptable non-infringing alternatives were available, as TP's own witnesses admitted; (ii) equipment sales to

STC had not yet occurred, might never occur, and might not include allegedly infringing products; and (iii) STC has demonstrated it is not interested in purchasing certain services and spare parts included in the award. Moreover, the lost profits award cannot stand for the separate reason that TP promised to license its patent on reasonable terms.

1. Acceptable Non-Infringing Alternatives Are Available.

In order to obtain damages in the form of lost profits, there must be an absence of acceptable non-infringing alternatives. *See Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1125 (Fed. Cir. 2003); *Grain Processing Corp. v. American Maize-Prods. Comp.*, 185 F.3d 1341, 1349-50 (Fed. Cir. 1999). Far from the trial record proving an absence of acceptable non-infringing alternatives, the uniform evidence showed that such alternatives in fact exist. TP's own witnesses admitted it and there was no competent evidence in the record that those alternatives were unavailable. Given the availability of acceptable non-infringing alternatives, no reasonable jury could have awarded TP \$45.3 million in lost profits damages.

TP accuses Andrew of infringement only when Andrew's system locates phones using an SDCCH; locations made using a TCH are not accused. In that regard, TP's President, Joseph Sheehan, explained that an option in the 3GPP Standard is "idle mode location" and that an alternative implementation of that option is to "move a mobile onto a traffic channel and locate it on the traffic channel [TCH]." A299:13-A300:4. Mr. Sheehan made clear that "Even in a case when a mobile—a person isn't talking on their phone, the TCH could still be used to locate them. The network could do that if they chose to implement UTDOA that way." A363:12-16. He then went on to explain that Andrew is currently using this alternative implementation of UTDOA idle mode location without infringing the '144 patent. A363:17-22. TP's then-standards representative, Robert Gross, admitted that all GSM systems perform UTDOA locations using a TCH even when a user is not on the phone—a process Mr. Gross called "direct assignment."

A957:6-A958:6. Mr. Gross explained that in practice all GSM systems “have to be able to do that. There’s a limited number of S[D]CCHS. And during the peak hours, it’s not uncommon to run out of designated S[D]CCH channels in which at that time the system does a direct assignment to the TCH. This is normal GSM operation.” A958:14-19 (emphasis added). TP’s Chief Technology Officer, Robert Anderson, also confirmed that idle mode location can be done using a TCH as an alternative to location using the accused SDCCH. *See* A722:3-12.

TP failed to produce any competent evidence that these alternatives were not available or that they would be unacceptable to STC, either in its own case or in its cross-examinations of Andrew’s witnesses. The only witness to testify as to the alleged unavailability of acceptable non-infringing alternatives was TP’s damages expert, Carla Mulhern. Ms. Mulhern is an economist, however, and she has no expertise to determine whether an alternative is technically acceptable or available. Indeed, Ms. Mulhern admitted on cross examination that she was not qualified “to provide opinions on matters that require technical expertise.” A706:24-A707:6. Ms. Mulhern’s testimony as to the technical acceptability and availability of non-infringing alternatives is outside the scope of both her expertise and her expert report.

Notwithstanding Ms. Mulhern’s lack of technical expertise, she claims that in order for an alternative to be available, certain changes would need to be made to the network “as typically configured and it would require the cooperation of a third party, that is the RAN vendor.” A725:1-3. But Ms. Mulhern’s understanding is not based on any testimony introduced at trial. Nor is Ms. Mulhern’s understanding itself evidence on which the jury could rely. *See* A706:24-A707:6. Not a single witness at trial testified that implementing idle-mode location over a TCH required third-party cooperation. Nor did anyone testify that it could only be done at a certain price, or even that it was not yet available on the market. The only testimony at trial is

that use of a TCH for idle-mode location is part of normal GSM operation and is currently implemented. *See* A363:12-22; A958:14-19.

The only testimony presented to the jury proved the existence of acceptable and available, non-infringing alternatives. Without any evidence to the contrary, no reasonable jury could have found otherwise. Given the existence of those alternatives, the Court should set aside the entire damages verdict as a matter of law. In the alternative, and for the same reasons as given, the Court should order a new trial on the issues of damages because the jury verdict was clearly against the great weight of the evidence.

2. TP Promised To License The ‘144 Patent On Reasonable, Non-Discriminatory Terms.

The jury’s award of TP’s lost profits should be overturned because TP made a promise to license the ‘144 patent on reasonable, non-discriminatory terms. The promise is contained, for example, in TP’s “UTDOA in GSM and GPRS Feasibility Study.” A223 at 3.3.5. None of TP’s witnesses denied that this document promises a license on reasonable, non-discriminatory terms. And none of TP’s witnesses denied that this document covers idle-mode location over an SDCCH. *See* A220. The only explanation TP offered for why this promise to license is not applicable to Andrew was that, at the time it was made, Andrew was not yet a member of ETSI. A345:12-21. But as demonstrated by Oskar Magnusson, Andrew’s representative to the ETSI standards body, the Feasibility Study and the promise therein were available to Andrew on ETSI’s website long after TP first presented it to ETSI. A863:25-A865:5; *see* A922:10-25. The document itself puts no time limit on the promise. Moreover, TP never produced any evidence to show it had retracted the promise. *See* A925:24-A926:2. Given this promise to license, TP is not entitled to lost profits damages. *See also* Section IV(E), above. The Court, therefore, should

set aside the jury's damages verdict. In the alternative, the Court should order a new trial on damages as the jury's verdict was clearly against the great weight of the evidence.¹⁹

As an alternative the Court should enter remittitur capping TP's damages at \$708,225 based on the trial record. This amount is the appropriate royalty amount that is calculated from the "25-percent rule." Ms. Mulhern has authored an article on using the 25-percent rule to establish a reasonable royalty. *See* A728:4-9; A729:5-23. During cross-examination, Ms. Mulhern admitted that the 25-percent rule is an appropriate tool used in analyzing reasonable-royalty damages and explained that it is "a method I have used, among others, in calculating reasonable royalty." A733:25-A734:6; *see* A728:17-25. That rule states that the licensee should pay a royalty rate equivalent to 25 percent of the licensee's expected operating profits for the product sold that incorporates the intellectual property at issue. A729:24-A730:4. As applied to Andrew's operating profits for phases 1 and 2, the 25-percent rule produces a royalty amount of \$708,225. *See* A731:5-A732:19. Andrew's damages expert, Mr. Hoerberlein, agreed with this royalty calculation and testified that the 25-percent rule is a "fair and reasonable way to go about looking at a reasonable royalty." A962:15-21. For these reasons, Andrew requests that if the Court does not set aside the jury's damages verdict, that it enter remittitur in the amount of \$708,225.

¹⁹ Nor is TP entitled to a reasonable royalty in this case. Significantly, TP never put in any evidence on what a reasonable royalty would be or on the various factors relevant to a reasonable royalty analysis. During trial, TP's witnesses repeatedly testified that TP's promise to license did not mean that TP was willing to license the '144 patent for free, but those witnesses failed to testify as to what might be a reasonable, non-discriminatory royalty. Andrew does not seek a free license—it merely seeks a right to license the '144 patent on reasonable, non-discriminatory terms, to the extent such a license is necessary for the products at issue. But because TP failed to put in any evidence on what reasonable, non-discriminatory terms might be, TP is precluded from now seeking a royalty as an appropriate measure of damages. *See SmithKline Diagnostics, Inc. v. Helena Labs. Corp.*, 926 F.2d 1161, 1164 (Fed. Cir. 1991) ("[T]he amount of a prevailing party's damages is a finding of fact on which the plaintiff bears the burden of proof by a preponderance of the evidence."); *Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 895 F.2d 1403, 1406-8 (Fed. Cir. 1990) (affirming award of minimal damages when no reliable proof of a reasonable royalty was present).

3. TP Is Not Entitled To Damages On Any Equipment That Andrew Has Not Yet Supplied To STC.

Under 35 U.S.C. § 271(f), TP cannot be awarded any damages for components Andrew has not yet supplied from the United States. The Federal Circuit has emphasized “there can be no liability under § 271(f)(1) unless components are shipped from the United States for assembly.” *Pelligrini v. Analog Devices, Inc.*, 375 F.3d 1113, 1117 (Fed. Cir. 2004). If there can be no liability, there can be no damages. TP admits that § 271(f) covers only supplied components and admitted that it was seeking damages under § 271(f) only “with respect to just what was actually supplied.” A239:22-24.

The jury’s damages verdict of \$45.3 million is based on TP’s damages with respect to the entirety of TP’s bid to STC and is not limited to those components Andrew actually has shipped. The only evidence of shipments made to STC were in connection with phases 1 and 2 of Andrew’s contract with STC—totaling 983 sites. *See* A697:21-23; A964:19-24. If the Court finds there was no offer for sale from the United States, and that TP is entitled to damages only under § 271(f), then the Court should set aside the jury’s damages verdict and order a new trial on the issue of damages.

As a matter of law, TP is not entitled to damages for any future phases under § 271(f), as there is no evidence that any additional sites have been shipped from the United States to STC. A712:1-9; A718:10-13. As for the first two phases that have shipped, TP failed to introduce any competent evidence regarding the appropriate amount of damages. Indeed, TP’s damages expert only testified about the appropriate measure of damages incurred from TP’s lost sales associated with TP’s bid to STC in its entirety—2,888 sites. *See, e.g.*, A688:17-20; A694:14-18; A703:2-9. When asked about damages associated with the 983 sites already shipped, TP’s damages expert testified she had “calculated [those damages] to be \$18.6 million as of the time of my report”

A702:21-24. That was the full extent of TP's testimony on the appropriate measure of damages for phases 1 and 2. TP's expert gave no explanation for how she calculated that figure. Nor did she explain what went into her calculation or how to apportion the damages for components, operations and maintenance, or spares. In short, she gave nothing but an unsupported dollar amount. That is not a damages figure arrived at with reasonable certainty; it is a number that is remote, speculative, and that lacks any basis. *See, e.g., Oiness v. Walgreen Co.*, 88 F.3d 1025, 1029-30 (Fed. Cir. 1996) (rejecting extrapolated lost profit calculations when the damages rested on unsupported assumptions "fraught with speculation"); *Yarway Corp. v. Eur-Control USA, Inc.*, 775 F.2d 268, 275 (Fed. Cir. 1985). Without any evidence in the record on which a reasonable jury could rely in determining appropriate damages for phases 1 and 2, the Court should order a new trial on the issue of § 271(f) damages.

In the alternative, the Court should enter remittitur capping TP's damages at \$9,946,786, the amount of damages calculated by Andrew's damages expert to compensate TP for the alleged infringement associated with Andrew's shipments for phases 1 and 2. *See* A968:10-A977:10.

4. No Reasonable Jury Could Have Awarded TP \$45.3 Million Based On Andrew's Offer For Sale.

a. There Is No Evidence That STC Would Award All Phases To Andrew.

It is undisputed that Andrew has only been awarded three phases of the STC rollout. Although Andrew's initial bid was for a kingdom-wide rollout of over 4,000 cell sites, STC did not award Andrew the entirety of that business. Instead, STC awarded Andrew a limited rollout of only 600 cell sites. *See* A967:15-19. As that work was being completed, STC then awarded Andrew an additional rollout, this time for only 383 sites. A967:20-24. STC has now made a commitment to Andrew for a third rollout, but has not yet committed to any particular type of

equipment, any number of cell sites, or any other commitment for particular goods or services. A967:25-A968:9.

The award of additional business to Andrew was not guaranteed simply because Andrew had been awarded the first two phases of STC's rollout. A946:18-A947:11. TP continued to bid against Andrew for the STC business, and met with STC on several occasions to bid actively against Andrew for that work. A341:21-A342:20. Indeed, Mr. Sheehan testified that STC was interested in doing a deal with TP for UTDOA location equipment even after STC entered into a contract with Andrew and that he was confident TP would get a deal with STC. A342:1-20. Moreover, Terry Garner, President of Andrew's Network Solution's Group, testified that each of the awards from STC has been independent of the other and that Andrew has no indication that it will win future STC business. A946:18-A947:11. Nor has Andrew received any commitment from STC that it will receive additional phases beyond what it has been awarded so far. A947:21-23. In that regard, Mr. Garner testified that each additional award of future business is likely to remain competitive. A947:24-25.

Further, there is a real possibility that STC could award additional phases to TP. As Mr. Garner testified, there are no interoperability issues between TP's equipment and Andrew's equipment, indicating that STC could in fact replace Andrew with TP without difficulty. A948:6-20. The fact that TP continues to bid on the STC business against Andrew also indicates that there are no interoperability issues. *See, e.g.*, A342:1-20. Given STC's solicitation of bids from TP since the award of the first phases to Andrew and TP's continued attempts to win future phases of the UTDOA business from STC, there is no real certainty or probability that TP has lost profits associated with the accused UTDOA equipment beyond the first two phases of STC's rollout. Any damages award for future phases is therefore too speculative to stand.

b. There Is No Evidence That STC Would Award The Contract For The Proposed Amount Of Equipment Or That The Equipment Would Be Infringing.

Even assuming that STC continues to place orders for UTDOA location technology, there is no guarantee of how much equipment will be ordered. *See* A717:13-A719:10. STC initially ordered 50 million SAR worth of equipment for a 600-site rollout for phase 1. A967:15-19. The second order was for 40 million SAR worth of equipment and only 383 sites for phase 2. A967:20-24. The third order is just a commitment at this point, for only 35 million SAR. A967:25-A968:2. The trend has been for STC's order amounts to decrease, indicating that it is unlikely that STC will ever spend the \$322,500,000 that TP's initial bid contemplated. *See* A692:12-14. Moreover, TP assumes that the type of equipment will remain the same, but there is no evidence of what type of equipment STC will actually purchase for phase 3, or for any future award that it might make to Andrew. STC's initial Request For Proposal outlined six location scenarios, only three of which required UTDOA functionality. *See* A172 at 2.6; A719:11-14. Ms. Mulhern recognized the possibility that given those six possible scenarios, future equipment purchased by STC might not include the UTDOA equipment accused of infringement in this litigation. *See* A717:13-24; A719:11-19; A712:24-A713:11. STC could choose to cease its UTDOA rollout at 983 sites and move toward a different technology. If that new technology does not infringe the '144 patent, TP is not entitled to lost profits on Andrew's supply of that equipment. Moreover, STC is also likely to continue to solicit bids from TP for future business, both UTDOA business and business that does not include UTDOA functionality.

Given this uncertainty as to whether future business will be awarded to Andrew and whether that business will even include UTDOA functionality, an award of lost profits on the entirety of TP's initial bid is too remote and speculative to be sustained. Nor are these the only uncertainties associated with TP's damages claims—TP also ignores the pricing cap imposed by

STC and STC's refusal to purchase ongoing operations and maintenance or spares in the amounts requested by Andrew. *See* A734:24-A735:8; A965:9-A966:5.

c. There Is No Evidence That STC Would Award All Phases At TP's Proposed Pricing.

TP's damages award is based on its own proposed pricing for an entire kingdom-wide rollout of 2,888 sites. *See, e.g.,* A688:17-20; A694:14-18; A703:2-5. STC's implementation of the UTDOA equipment, however, has been on a phased rollout basis. For the first phase, STC informed Andrew that it was willing to pay only 50 million SAR. *See* A207; *see also* A967:15-19. STC also demanded 600 sites at that price despite the fact that Andrew could not provide that many sites for that price unless it reduced its price-per-site significantly or gave STC a number of sites for free, which is what Andrew ultimately decided to do. *See* A710:18-A711:8; A207. Terry Garner, Andrew's division president, testified that despite Andrew's attempts, STC refused to pay any more than 50 million SAR and refused to accept less than 600 sites at that price. *See* A949:10-25. STC did the same for its second phase, committing to Andrew only for 40 million SAR. A967:20-24. Although TP claims that STC would have treated it differently, there is no basis in the record to support that belief.

STC has also refused to purchase ongoing operations and maintenance or spares at any level near what Andrew or TP had included in the original bids. A large portion of TP's damages award is profits associated with ongoing operations and maintenance revenue of approximately \$27 million through A996. A685:24-A686:5; A713:24-A714:3. But despite Andrew repeatedly telling STC it should purchase ongoing operations and maintenance, to date STC has purchased only \$1,030,755 in ongoing operations and maintenance. *See* A965:9-14. Mr. Sheehan explained that STC "would pay" this operations and maintenance, but he offers no support for this position that STC would accept such a contractual requirement. A284:13-23;

see also A965:5-A966:5). Ms. Mulhern relies on this statement as the entire basis for her estimate of lost profits of ongoing operations and maintenance totaling over \$15.5 million. A700:3-7. The same is true for the purchase of spare parts. TP asserts that it would require that STC purchase spares in the amount of \$4.1 million over a 5-year period. A685:24-A686:5; A699:13-21. But there is no evidence that STC would agree to TP's requirement. In fact, STC has purchased only \$600,103 worth of spares from Andrew to date. *See* A965:24-A966:5. Ms. Mulhern's calculations also failed to account for the duties and taxes that Andrew has had to pay in connection with the STC project. A960:15-21. As Mr. Hoeberlein testified, Andrew has spent more than \$1.4 million in duties and taxes. A966:6-12. As a result of Ms. Mulhern's unsupported inclusion of ongoing operations and maintenance and purchase of spares, and her failure to deduct duties and taxes, Ms. Mulhern's lost profits estimate is grossly overstated.

Given the speculative nature of TP's damages verdict, this Court should set aside the jury's award of damages. In the alternative, the Court should order a new trial on damages as the jury's verdict was clearly against the great weight of the evidence. In another alternative, the Court should enter remittitur capping TP's damages at \$9,946,786. This amount reflects the damages that TP would have incurred given STC's actual commitments, including the price caps and unwillingness to purchase operations and maintenance or spare parts. *See* A968:10-A977:10.

V. CONCLUSION

For all of the above reasons, Andrew respectfully requests judgment as a matter of law in its favor, or alternatively, a new trial on the issues presented above.

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CERTIFICATE OF SERVICE

I, Andrew A. Lundgren, Esquire, hereby certify that on November 1, 2007, I caused to be electronically filed a true and correct copy of the foregoing document with the Clerk of the Court using CM/ECF, which will send notification that such filing is available for viewing and downloading to the following counsel of record:

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I further certify that on November 1, 2007, I caused a copy of the foregoing document to be served by e-mail and hand delivery on the above-listed counsel of record and on the following in the manner indicated:

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